

INSECT WONDERLAND

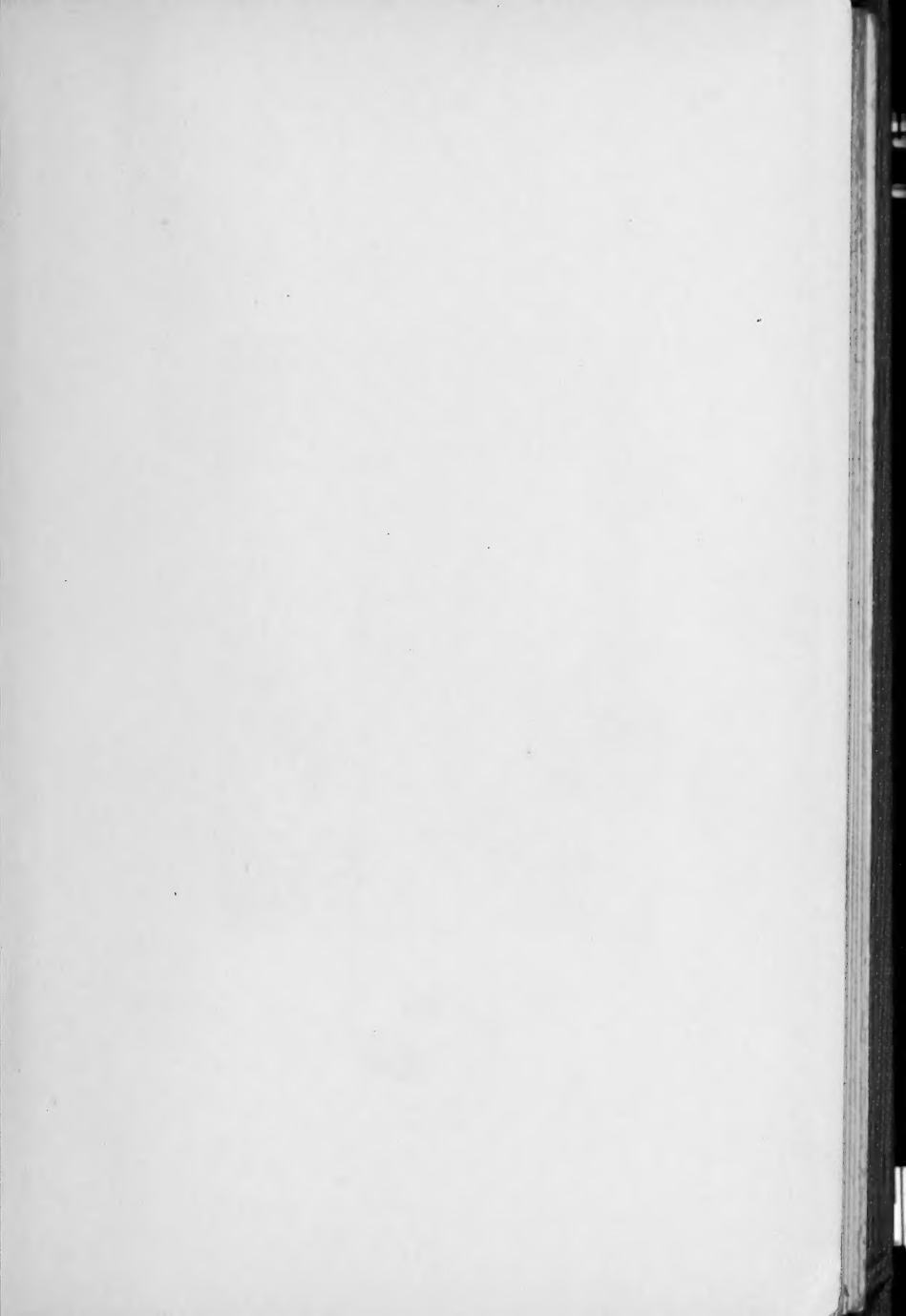


CONSTANCE M. FOOT



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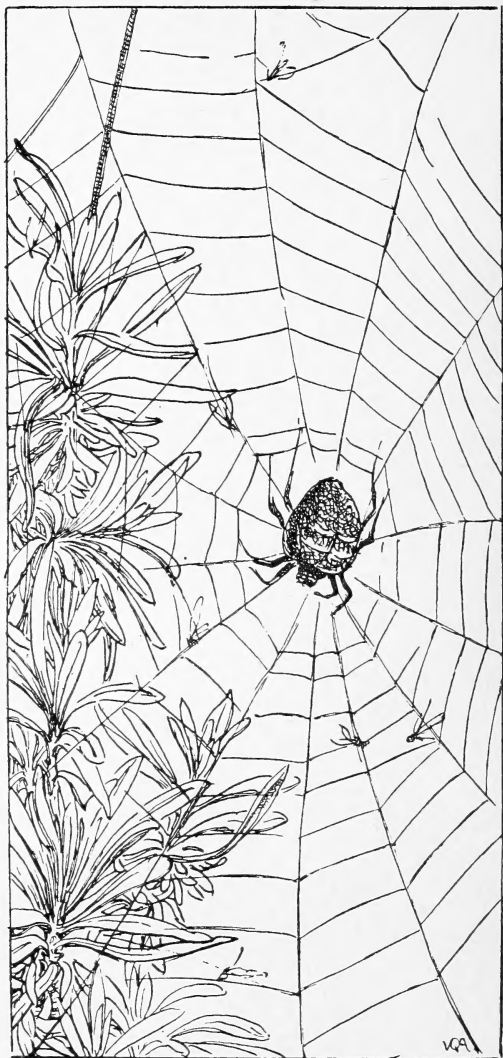
INSECT WONDERLAND

BY THE SAME AUTHOR

SCIENCE THROUGH STORIES

LYRICS





"I'm not an insect!"

BY
CONSTANCE M. FOOT

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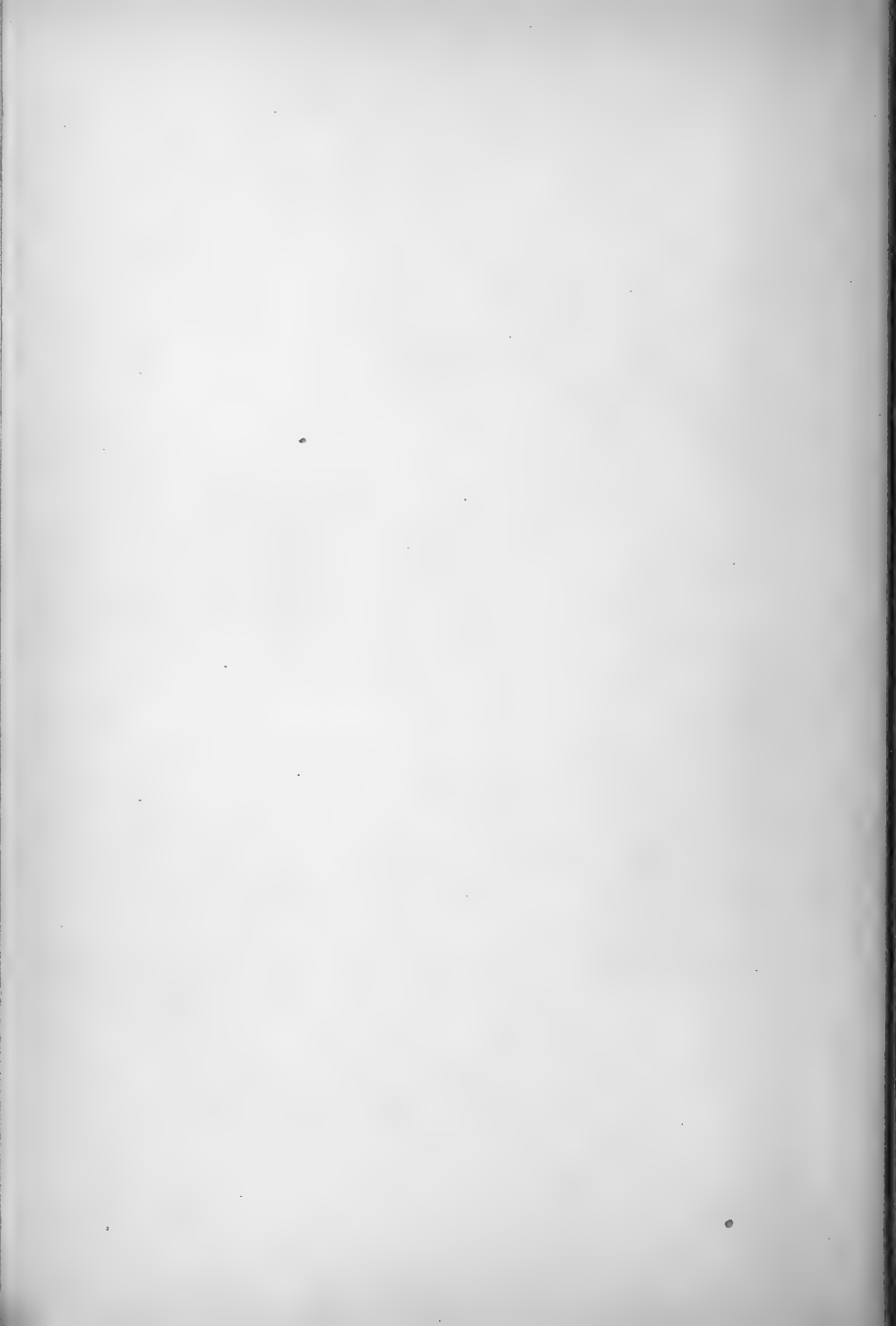
PREFACE

THE kind reception accorded to my little book *Science through Stories* encouraged me to feel that there might be an opening for another book upon similar lines. I have, therefore, chosen for the subject of this volume some simple facts concerning the Insect World, and have selected one or more specimens from each of the seven great natural orders of insects according to the Linnean system of division.

I have endeavoured to treat the subject with the same simplicity as in my previous book, and trust that it may prove equally acceptable as an educational reader for the Kindergarten, or as a book to be read by mothers merely for the amusement of their little folks.

C. M. F.

November, 1909



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SPIDER WEB CORNER

SUMMARY

A rose-bush and an early thrush talk together about the beauty of the spider's web near by. In the course of the conversation, the thrush refers to the spider as an "insect." The latter overhears the remark and becomes very indignant, saying, to their surprise, that he is *not* an insect. They ask him to explain in what way he differs from one. The thrush flies away, and the discussion is taken up by a neighbouring lavender-bush and a tall Japanese anemone, to whom the spider tells a great deal about himself and his many relations, particularly the Trap-door spiders.

SPIDER WEB CORNER

IT was peep of day, and the birds were chattering to each other about all they had to do.

Mr. Sparrow and his family were always up first; Mrs. Thrush, too, was an early riser, for she had a large family to see after and there was their breakfast to get. This morning she had been lucky and found just what she wanted, so she thought that she would fly back home by her favourite rose-bush.

Miss Rosie was up, looking very pretty and sweet in her dainty pink frock.

"How are you, Mrs. Thrush?" she called out, as she saw her friend come flying along.

"Very well, thank you," replied the thrush. "What a lovely morning it is!"

"Lovely!" said the rose-bush. "I have been watching Mr. Spider finish his web. See, there it is on the next bush to me—Miss Lavender, you know. Is it not a pretty pattern? All shining, too, in the sun with drops of dew."

"Very pretty," answered the thrush, but not very heartily, for she did not much care about spiders, except to eat; and she thought that she had heard there were some kinds which eat little dead birds, so she said:

"But I must own that I think it very mean of Mr. Spider to catch the poor flies and bees and ants and wasps in that way."

"But he must get something to eat," said the rose-bush, "and for the little ones too. It is no worse than your getting worms for your family, if you will excuse my saying so, Mrs. Thrush."

"No more it is," she replied. "When you come to think of it, we must all have food."

"I think that Mr. Spider and his whole family are wonderfully clever," continued the rose-bush, "just as ants are—I often watch them at work."

"Yes," said the thrush, "I suppose all those insects——"

"Insects!" called out the spider, who had really been listening to the conversation whilst finishing off his web, though he had not appeared to be doing so. "Insect indeed!" he continued in an angry tone of voice. "*I'm* not an insect!"

Mrs. Thrush fluttered about feeling too nervous to answer the spider, for he seemed very cross and spoke so sharply. He looked so fierce, too, that she thought again of what she had heard about the little dead birds.

But Miss Rosie, who was always a peacemaker, cried out :

"Mrs. Thrush meant no harm, I am sure, Mr. Spider. She is such a good mother and she sings so nicely too ; and, do you know, I—I—hardly like to say it, as you seem so offended, but I quite thought that you were an—an—insect !"



"Eight legs ! How wonderful ! And I've only two !"

"Nothing of the kind," said the spider, who had not quite recovered his temper ; "I should really have thought you would have known better, Miss Rosie."

"I should like to understand about it," she replied, "and hear what you really are, so as not to make a mistake another time, as it is very unkind to hurt people's feelings."

"Well," said the spider, "to begin with, I have eight legs."

"Dear me!" exclaimed Mrs. Thrush, hopping on to a twig a little nearer to the spider. "Eight legs! How wonderful! And I've only two!"

The spider took no notice of the thrush's remark, but continued:

"An insect has only six legs; that's two less than I have, you see."

"Is Mr. Bee an insect?" asked the rose-bush timidly. "I think he has six legs."

"Yes, yes," said the spider, "that's right, Miss Rosie. He is an insect, sure enough; so are Mrs. Wasp and Master Fly and Mrs. Ant. I can't think of any others at this minute."

"Is having two legs more the *only* thing that makes you different from an insect?" suddenly asked the thrush.

"Oh dear, no!" replied the spider. "I'm different in a lot of other ways—for one thing I'm not divided into three——"

"Not divided into three!" repeated Miss Rosie and Mrs. Thrush together, looking quite shocked.

The spider shook with laughter, and said:

"Yes, I mean it; the insects are divided into three parts and I am not. What do you think of that?"

"It is very strange," said Miss Rosie, "for Mr. Bee looks all in one to me."

"Well, he isn't," said the spider; "he may look

all in one, but he is really divided into three parts—his head, his front body, and his hind body.”

“But excuse me,” said the rose-bush, “I can’t see so much difference between you and Mr. Bee and Mrs. Wasp, for you’ve got a head too!”

“Yes, of course I’ve got a head,” replied the spider, “but it is not divided from my body in the same way that Mr. Bee’s is.”

“Oh, I see now,” said Miss Rosie; “you can’t move your head about as he does.”

Instead of replying to this the spider whispered:

“Excuse me a moment; I think I see a fly!”

He hurried away and disappeared under a leaf of the rose-bush.

“It is very strange,” she murmured, “how Mr. Spider saw that fly, for he never turned his head; he was looking at us all the time. I must ask him about it when he comes back.”

“It certainly was strange,” agreed Mrs. Thrush, and then she added, “I think I’ll be going, for I see that Mr. Spider does not much care about my being here—perhaps he is afraid I may be wanting to catch him for breakfast!”

Then with a good-bye chirp to her friend off she flew.

The rose-bush was still thinking over all the spider had said when she heard a little voice saying:

“He certainly didn’t look round and yet he saw Master Fly. I can’t understand it, can you?”

"No, Lavvie dear," replied the soft voice of Miss Anemone from Japan; "but Rosie is going to ask him when he comes back."

"Ah!" exclaimed the rose-bush, "did you and Lavvie hear all the interesting things Mr. Spider has been telling us?"

"Yes," replied the lavender-bush; "I hope it did not matter—our listening."

"Not a bit," answered the rose-bush; "it was no secret; but weren't you surprised?"

"Indeed we were," cried the anemone, "for, to tell the truth," and she whispered as the wind gently swayed her tall head closer to the rose-bush, "we always thought Mr. Spider was an insect."

"So did I," answered Miss Rosie; "but he is quite different—— Ah! here he comes!"

The spider ran back into the centre of the web and swung himself gently to and fro for a moment. Then he said:

"False alarm, Miss Rosie. No fly there; he evidently only peeped in."

"A good thing for poor Master Fly," she laughed. "By the by," she continued, "how came you to see him, although you never looked round?"

"Ah!" said the spider, "you must remember that my eyes are set so that I can see all ways at once."

"Oh! then, you don't have to turn them round to see," chimed in Miss Lavender.

"No," replied the spider; "in fact, they cannot

move. In our family we usually have six pairs of eyes."

"No wonder he can always see Master Fly and Mr. Bee so quickly," whispered the anemone to the lavender-bush. Then she said aloud :

"There is one thing in which I can see that you are different from an insect—you have no wings, Mr. Spider."

"No," he said, "I have no wings, but I have eight legs, don't forget that!" It made him feel rather cross again when an insect was mentioned. Then he continued, "And I have two legs in front ; see here !" and he waved them. "These I use to feel with, and to take my food with ; and I have jaws, too, with poison in them, that I can bite with if anyone hurts me."

The two bushes and the anemone glanced at each other as they saw the spider was looking very cross and fierce ; so Miss Rosie quickly turned the conversation by saying :

"We all admire your beautiful web, and wish we could spin as you do and be as wise and clever."

These kind words seemed to make the spider forget his ill-humour, and he said :

"I am glad you like my web, Miss Rosie. The silk I use is very fine but very strong."

"Where do you keep it ?" asked the anemone.

"I have some little pockets in the back of my body," he answered, "with tiny holes in them ; these are my



"And when I had fixed it there
I was able to begin my web."

spinnerets, and the silk comes out through the little holes."

"I often wonder how your net holds together," said Miss Lavender.

"I have two kinds of silk," replied the spider; "one is smooth, and the other has a tiny drop of glue which makes the lines stick together."

"That is wonderful," said the lavender-bush.

"The other day I was watching you make a web," said Miss Rosie, "and I saw you spin a long, long thread and leave it hanging down. What did you do that for, Mr. Spider?"

"I was waiting for the wind to catch it and carry it across to the wall near where Miss Clematis is, and when I had fixed it there I was able to begin my web."

"I cannot think how you keep it so even," said the anemone.

"Oh, I guide the silk with the claws on my feet," he replied.

"And you are so patient too," said Miss Rosie ;
"if anyone breaks your web, you begin it all over again and never seem to mind."

"I am used to getting my web broken," replied the spider, "and sometimes I have to remake it two or three times ; but a spider must be persevering, or he would be of no use at all. That reminds me of some little verses our mothers always teach us as soon as we are old enough to learn them. I will say them if you like."

"Oh, do, please," they exclaimed.

"They are called 'Persevere'," he said.

" Little Spider, now begin
Net of gossamer to spread ;
You must learn to weave and spin
Patiently each silken thread.
Little Spider, spin, spin, spin.
'Tis the only way to win.

" Should a foeman, drawing near,
Break your pretty web in twain,
Then, oh, little Spider dear,
You must just begin again !
Little Spider, spin, spin, spin.
'Tis the only way to win.

" Do not cry 'Alack-a-day !'
Learn instead to persevere,

For it is the only way
To succeed in life, my dear.
Little Spider, spin, spin, spin.
'Tis the only way to win."

"That *is* pretty!" they all cried together. "Thank you, thank you, Mr. Spider."

"Still, I think it is very tiresome for you," said Miss Rosie, "to have your web broken, for, I expect, it startles you."

"Well, it does make me jump sometimes," he replied, "but I quickly wind up the end of my silk and run away and hide. When my enemy has gone I come out again and find a new place. For, as I said before, I am quite used to this; so in fact are all my relations."

"Have you many relations?" asked Miss Lavender.

"Oh, yes, numbers," answered the spider. "My mother used to tell me about them."

"Oh, do tell us!" they all cried.

"Wait one moment," he said. "I feel the web shaking; I believe there must be an insect. I will just run and see."

He soon returned, in a very good humour; for it was poor little Master Fly, who had peeped in a tiny bit too far and could not get out again in time.

"Well," he said, running back to the centre of his web, "you were asking about my relations. There are so many that I hardly know where to begin, but

I think you would like to know about the part of the family called 'Trap-door.'"

"What a funny name," said Miss Rosie.

"They're very clever, though, I can tell you," said the spider. "You will hear presently why they have got that name. They live deep down in the earth and that is where my cousin, Mrs. Trap-door, makes her nest."

"Do tell us just how she does it," asked Miss Lavender in excitement.

"First of all she bores a hole in the side of a bank, next she scoops out the earth and makes it quite round like a tunnel, then she lines it with silk."

"Lines it with silk!" exclaimed the anemone; "how pretty it must be."

"Yes, it is very pretty," replied the spider, "but the wonderful part is that she makes a trap-door."

"And what does she make it of?" enquired Miss Rosie.

"Of earth," he replied. "She spins a round web, very thick, and then she fills this with earth, and makes a strong hinge of web, so that the door opens and shuts with a snap. What do you think of that?"

"Wonderful indeed!" they all cried. "Tell us some more, Mr. Spider, please do; it is like a fairy tale."

"Well, it isn't a fairy tale," he said, "it is real truth; I told you that the Trap-door family was very clever."

"They certainly are," answered the rose-bush; "and when the door is finished, what then?"

"Why, then Cousin Trap-door glues some moss and ferns on the outside of her door."

"And why does she do that?" enquired the anemone. The spider laughed.

"So that her enemies cannot see her door!" he said.

The others laughed, too, at this, and Miss Lavender asked:

"Couldn't you make a tunnel and a trap-door, Mr. Spider?"

"No," he replied; "I do not belong to that clever branch of the family."

"What part do you belong to, then?" enquired the anemone.

"Oh, I am a 'Garden-Spider,'" he answered, "and although we cannot make tunnels or trap-doors, our webs are generally thought to be the most beautiful of all the web-spinning Arachnida."

"Arachnida! what are Arachnida?" they all asked together.

"Merely our family name," he replied.

"What a grand name you have," said the anemone.

"No grander than yours, Miss Japonica," said the spider, bowing.

"Does Mrs. Garden-Spider make her nest in a tunnel like your cousins, the Trap-doors?" suddenly asked the rose-bush.

"Oh dear, no," he replied. "I will tell you presently about our nest and little ones, but I was just going to tell you first how the Trap-door cousins feed their children."

"Ah!" said the lavender-bush, "I was thinking I must ask you how they got food into their tunnels."

"They stay in their home all day," explained the spider, "and at night they come out and spin a little web in the grass to catch food in, and as well as that, they hunt for food and pounce upon beetles, dragging them, when they are caught, into their tunnel. So you see they have plenty to do."



"At night they come out and spin a little web in the grass."

"Thank you," said the anemone. "Now do tell us about Mrs. Garden-Spider's nest."

"Well, to begin with, she makes it of lovely fine silk, very soft. Then she weaves a cocoon——"

"Stop, please, Mr. Spider. What is a cocoon?"

The spider thought a moment, then he replied:

"Do you know what a ball is like? Its shape, I mean?"

"Oh, yes," they exclaimed; "it is round."

"A cocoon is something like that," he went on: "Mother Spider makes it of silk and lays her eggs in it, then one fine day out come the baby spiders."

"And what does their mother give them to eat?" asked Miss Rosie.

"Oh, insects," he said. "She has a line near her nest and she sits at the door and holds this in her claw."

"What does she do that for?" asked the anemone.

"Ah!" said the spider, "*that's* the secret. If I let you into it, you must not tell the insects, mind."

"We never repeat what we are told," said Miss Rosie a little haughtily.

"I am sure you don't," cried the spider; "I only said it in fun. Let me see, I was telling you that Mother Spider holds the line in her claw, and when she feels it move she knows that there is something in the web, so down she runs, and if there is a bee or fly, she takes it for her babies."

"But how can she get it there?" enquired the lavender-bush.

"She kills it first, then she makes it into a tidy little bundle, winds some of her silk round it, and carries it off to her nest."

"And the babies—what are they like?" asked Miss Rosie. "I suppose they are little grubs or something before they are spiders?"

"Not at all," he replied; "that is where they are different again from insects, for they come out of the egg perfect little baby spiders."

"Then do they always remain babies?" asked the anemone.

"No, certainly not," he answered; "they grow very fast, and when they are old enough, they go off out of the nest and spin webs for themselves and catch their own food. They often change their skins when they are little, so that of course they have not such beautiful coats as grown-up spiders have."

"You wear velvet coats, do you not?" asked Miss Rosie.

"Yes, and some of us have stripes and others spots. Then, too, our coats are of different colours: some of us wear black, others brown, and others again red or gold."

"Very handsome coats," murmured the lavender-bush.

"Yes, our nice coat is our only beauty," he said sadly.

"I don't seem to know any of your family who wear the brown coats," said the anemone.

"Ah, the House-Spiders, you mean. No, I do not expect you know them, for you all live out of doors as I do, but they live in houses and spin plain brown webs in the corners of rooms."

"What other relations have you, Mr. Spider?" asked the rose-bush.

"Oh, numbers of others if I had only time to tell you about them, but I cannot stay any more as I must really get my breakfast, but perhaps some other day I can tell you about the spiders that live under water——"

"Live under water!" they exclaimed, "but how can they breathe without air?"

"They bottle some and take it down with them," he explained, "and come up again when they want some more—those are my cousins the Water-Spiders. I could tell you lots about them. They have lovely nests that shine like silver and their eggs are a golden colour."

"Oh, how I should love to hear about them," cried the rose-bush; "and what others will you tell us about some day?"

"More about the Water-Spider family, for there are several different kinds. There is one that walks on the water, and another that builds a little raft to sail in—he goes out and catches insects as they skim over the water. In fact, I could tell you

lots more, for we are a big, big family, but I must stop now."

"Well, we *have* enjoyed ourselves," said Miss Rosie, "and we shall try and remember all that you have kindly told us."

"Very pleased, I am sure," said the spider, "but whatever you do, be sure and remember that I am not an *insect*!" and with a laugh he ran off.



BUTTERFLY GREEN

SUMMARY

The west wind talks with a heartsease and she tells him how much she wishes that she had wings so as to fly, like the butterfly, enquiring if it is the gentle breath of the wind which lifts up the wings of the latter. The wind says that it is not, and advises her to ask a butterfly about it. She does so the next time one passes, and the butterfly brings some of her playfellows and they tell how once upon a time they were not pretty and had no wings, but were each a little caterpillar and then a chrysalis, before they became bright, beautiful butterflies.

BUTTERFLY GREEN

“**W**HAT are you dreaming about, little Miss Heartsease?” asked the west wind as he gently kissed the edge of her purple gown and softly rustled in the leaves of the lime-tree above her head.

“Ah, dear Wind,” replied the heartsease with a tiny sigh, “I was wishing—that’s all!”

“Wishing for what?” he asked. “You are generally so contented.”

“Wishing that I had wings like a butterfly.”

“You are very sweet as you are,” he said.

But the heartsease was still thinking of her wish and continued:

“Could not you make me fly, dear Wind? for surely it must be you that gently raises the pretty wings of the butterfly!”

“Indeed you are mistaken, Miss Heartsease,” he replied.

“Well,” cried the heartsease, “I wonder if she could help me to fly. It must be lovely to go up towards the blue sky as she does.”

“Why not ask her?” suggested the wind.

"She would not hear me, for I am so little," sighed the heartsease.

"Still, you could but try to make her hear the next time she passes your way," persisted the wind.

"Yes, I might certainly try," answered the heartsease. She was silent for a moment, then she added: "And perhaps, dear Wind, you will bear my voice up to her."

"That I will," he promised. "Now you must watch for your butterfly."

Then, whilst the heartsease watched, the wind passed up and down the garden, and the other flowers bowed their heads as he came, to hear the pretty message he had for each of them.

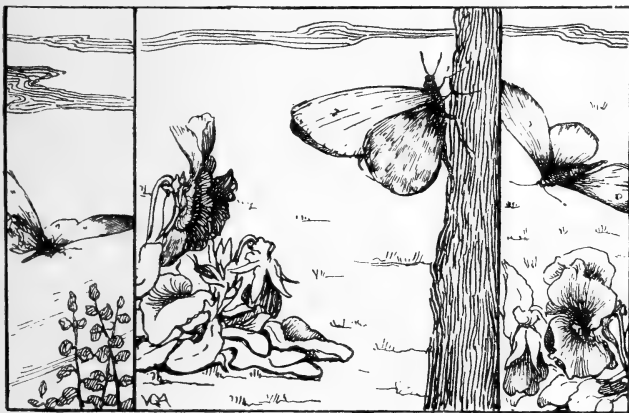
After patiently waiting for a little time, the heartsease saw her favourite butterfly come fluttering into the garden. She had a broad orange patch on the tip of her front wings. She stopped for a moment to rest on one of the sweet honey flowers, then started off again, and after taking one sip of the nectar from the ivy-bloom, came quite near to where the heartsease lived. So Miss Heartsease determined to speak to her, and the wind, true to his promise, bore her little voice up to the gay butterfly.

"Sweet Butterfly,
Come whisper to me
Of all the fair things that, in flying, you see.
Would I had wings!
Then like you I'd fly
Above the green earth, beneath the blue sky."

The butterfly hovered a moment, then fluttered gently down close to the heartsease, saying :

"Well, little Miss Heartsease, that was very pretty. I wish I could say verses like that !"

"Fancy your wishing !" she exclaimed. "Do you know I have been wishing something too."



The heartsease noticed that all the bright colours were hidden.

"Have you?" answered the butterfly. "Do tell me what it was."

She perched herself as she spoke upon the trunk of the lime-tree, folding her wings upwards, and the heartsease noticed as she did so that all the bright colours were hidden.

"I hardly like to tell you," said the heartsease shyly.

"Oh, please do," cried the butterfly; "I do so want to know what you wished."

"I wished that—that I had beautiful wings like you, sweet Butterfly," she answered. "Do you mind telling me how you got them?"

"Well, I did not always have them," replied the butterfly. "Once upon a time I was an ugly little caterpillar."

"How very strange!" exclaimed the heartsease in surprise. "Then weren't you always a butterfly?"

"Oh, no, I was two other things before that. First a caterpillar, then a chrys——"

"Stop one moment, please," said the heartsease. "I am getting quite confused, and cannot think how you can be a caterpillar and a chrys—chrys something——"

"Chrysalis," said the butterfly politely.

"Chrys—chrys—I cannot quite say it—and yet be a butterfly."

"I will try and tell you if you would really like to hear."

"Oh, indeed I should," said the heartsease, "and you must be sure and tell me how you got your wings. But may I just ask the other flowers to listen?" she added; "for I know they would like to hear too."

"Pray do, little Miss Heartsease, for I love the flowers and often listen to you all talking. Whilst you tell the others I will just fly off and sip a drop

of honey, and will try and find some of my playfellows to bring back with me."

As she spoke she fluttered away to the other end of the garden, and the heartsease watched her alight upon the honeysuckle, which was filling the garden with its sweet scent. Then she called to the other flowers and told them what a surprise she had had about the butterfly, and asked them if they would like to listen to what she was going to tell them when she came back.

They were all delighted and promised to ring the bells when they saw the butterfly coming.

They had not long to wait, for very soon the butterfly returned, and with her came a pretty little blue one, and another with a body of dark blue and with red and blue wings, on each of which was a large bright eye-spot; whilst just behind followed two more, one having pale yellow wings with four red spots on them, and the second with red markings and white spots on its black wings.

The lily-bells rang loudly, and the flowers waved and bowed their heads to welcome their lovely visitors, whilst the wind hummed a gentle tune to the accompaniment of the rustling leaves.

Miss Heartsease's special friend led the way and settled back again near her on the trunk of the lime-tree, the others hovering in the air darting in and out among the flowers.

"I have brought my playfellows with me, you



The lily-bells rang loudly.

see," began the butterfly, "to help me tell you all that happens to us before we get our wings and gay dresses. Now, what would you like to hear about first?"

"Oh, tell us right from the beginning, please," cried the heartsease; "we are so anxious to know if you were joking when you said that you were once a little caterpillar!"

"No, indeed I was not joking," replied the butterfly; "it is not so very long ago that I came out of the egg —"

"Oh, you come out of an egg, then, like Mrs. Thrush's little ones!" chimed in the sweet-pea.

"Yes, out of an egg,"

answered the butterfly, "but a much smaller one than Mrs. Thrush's."

"And do you live in a nest?" enquired the anemone.

"No," answered the butterfly; "some lay their eggs under the leaves of the stinging nettles, and others under flowers and twigs."

"Nettles seem a strange place for eggs," said the heartsease thoughtfully.

"Not at all," replied the butterfly; "there is a very good reason for laying them there—it is to keep them safe, for few creatures want to eat stinging nettles!"

"Well, certainly it is a good way of keeping them safe," agreed the flowers.

"You do not all lay them on nettles, though," said the mignonette.

"No, not all," replied the butterfly; "but I think you do, 'Red Admiral,' do you not?"

"Yes," answered the one with the red markings and white on its black wings, poising himself lightly as he spoke a little higher up the lime-tree, "we lay our eggs under the nettles, and so does 'Peacock.'"

"They've got names," whispered the lily to the mignonette in great excitement.

"Yes," said the butterfly, who overheard the remark, "we have all got our names. I really must apologise for not saying this before and introducing my playfellows properly."

"We should like to hear all your names," said the lily timidly.

"You know 'Red Admiral' now," said the butterfly, "so I needn't introduce him.—Make your bow to our friends," she added, and the butterfly fluttered gently up and down. "And this little one like a flower is called 'Blue-wing,'" she went on. "Over there on the rose-bush is 'Peacock' with the lovely red and blue wings—we are very proud of her, but she is not at all conceited, although she is so handsome; and then I must not forget my dear little playmate 'Brimstone' with her pale yellow wings. Now you know us all."

"No, no," cried the flowers, "you have not told us *your* name yet!"

"Oh, I am 'Orange-tip,'" said the butterfly modestly. "Let me see, where had we got to?"

"You were telling us about the eggs being laid on the nettles," said the heartsease. "Do you lay yours there too, Orange-tip?"

"No," she replied, "we lay ours under the leaves of a plant which grows by the roadside. Perhaps you do not know it in this garden. It has pink and white flowers and its petals form a cross. Then there's Brimstone, who lays hers in quite a different place. You tell them," she said, looking towards her.

"We lay ours among the twigs of the alder trees by the river-side," she replied, fluttering forward with outspread wings, and resting lightly upon the edge

of the anemone. "You flowers will all know us Brimstones, I think, for we are the first butterflies to come out in the Spring."

"Yes, yes," came in a chorus from the flowers, "we know *you*, but we did not know your name before."

"But I am wondering, if you have no nest or anything, how the eggs get hatched," suddenly enquired one of the Miss Sweet-peas.

"Oh, the warmth of the sun hatches them," replied Orange-tip, "and then out come the caterpillars and——"

"There! I told you," exclaimed the heartsease in excitement. "Orange-tip *was* a caterpillar before she was a butterfly, and you would hardly believe me!"

"But you were surprised yourself, Pansy dear, were you not?" said the gentle voice of the mignonette.

"Yes, so I was, Mignonette. It is only that I forgot—I was so excited—and it was rude of me, too, to interrupt Orange-tip. I am sorry. Please go on about the caterpillars."

"I was going to ask Peacock to tell you about them," she replied, "whilst I take a little rest. Now, do tell them," she urged, for the beautiful butterfly was very shy, and was trying to hide away under the lavender-bush.

"Please, please do," cried the flowers; "we want so much to know what you do when you are a caterpillar."

"Well, we eat and eat and eat until we can eat no more," said Peacock, flying out from her hiding-place and perching upon the trunk of the lime-tree close beside Red Admiral, who chimed in :

"Yes, eat until our skin gets so full that we can eat no more."

"What happens then?" asked the heartsease.

"We have to keep quiet for a time, and we swell out the rings on our body," replied Peacock. "Then suddenly one day the skin splits and we creep out of it."

"Creep out of your skin!" exclaimed the flowers, looking quite frightened. "Oh! how *do* you get on without a skin?"

"We have a nice new soft one, all ready underneath, which stretches out as the old one did," explained Peacock, "so we begin eating again as happily as possible until *that* skin gets too tight and splits like the other. This goes on several times whilst we are caterpillars."

"And then?" asked the flowers anxiously.

"When we have grown big enough we stop eating and do not move for a great many days, but keep very quiet; our colour fades, our skin splits once more and we wriggle it off. Little bits of our butterfly dress can be seen underneath, but it is not finished, and our body is very soft and tender."

The flowers were breathless with excitement. Then the mignonette asked softly :

"What keeps your tender body from getting hurt?"

"A kind of gum oozes out all over it," explained Peacock; "this gets hard and keeps our body safe whilst it is growing into a butterfly."

"And then you are another sort of caterpillar, I suppose," said the lily shyly.

"No, Miss Lily-bell, I am no longer a caterpillar, but a chrysalis."

"*That's* the word you couldn't tell us, Pansy," exclaimed the flowers in the greatest excitement. "Chrysalis, chrysalis, chrysalis!" they cried all together.

"Yes, a chrysalis. Now, Red Admiral, will *you* tell them about this?"



Chrysalises and Caterpillars.

Red Admiral flew forward at once, for he was rather tired of keeping still, and was pleased when Peacock called him out. Orange-tip returned at this moment and asked if the flowers had enjoyed hearing about the caterpillars.

"Very, very much," they cried. "And now Red Admiral is going to tell us about a chrysalis."

"Our chrysalises," said Red Admiral, "are fastened under the leaves of the stinging nettles by silken threads and hang head downwards looking as if they were dead. But they only stay like this for a little time, and then one sunny day they break out of the chrysalis very much as they did when they were caterpillars out of the egg, but instead of being creeping, crawling, greedy caterpillars any more, they are butterflies and have——"

"Wings!" whispered the flowers in awed tones; and at the same moment the lilies rang their bells, the wind stirred and rustled the leaves of the lime-tree, and the flowers sang all together in a soft chorus:

"Would we had wings!
Then like you we'd fly
Above the green earth, beneath the blue sky."

And while they sang the butterflies danced in the sun.

"Is there anything more we can tell you, dear flowers?" asked Orange-tip.

There was a moment's silence, then the soft voice of the mignonette was heard saying timidly:

"I would like to ask one thing, please."

"And what is that?" enquired Orange-tip kindly.

"Well, you look so gay when you are flying, but when you were all resting I noticed that we could no longer see your bright colours, for your wings hid them. Why is this?"

"For safety," answered the butterfly.

"But why would you not be as safe," enquired the sweet-pea, "if your bright colours showed?"

"Other creatures might kill us," replied Orange-tip, "so you see we have to protect ourselves like that, otherwise we should have been killed long ago, and there would have been no more butterflies. That, too, is the reason why the underside of my wings is green and white, for then when I sip the honey from the parsley flowers I can scarcely be seen, for I am so like them."

"Other insects protect themselves by their colour, just as we do," put in Brimstone; "Mr. Spider is the colour of a dead leaf so that the birds may not see him, and Mr. Bee in his coat of brown and gold looks like the centre of the flowers out of which he sips the honey."

"May I ask something too, Orange-tip?" enquired the heartsease.

"By all means," replied the butterfly. "What is it?"

"Well, my friend Prim—the Evening Primrose, you know—told me that there were some butterflies

which fly chiefly at night. Are these any relations of yours?"

Orange-tip thought for a moment, then said:

"Oh, I know what Miss Prim means—those are moths, not butterflies. I cannot tell you much about them, except that their feelers are thick in the centre, and pointed at the end, and have little feathers on them; whilst ours are round and thick and have no feathers. Then, too, whilst we fold our wings upwards over our backs when we rest, they lay theirs down on their back, like a—a——"

"Bird," suggested Peacock.

"Yes," said Orange-tip, "that is right."

"But are they caterpillars and chrysalises before they are moths?" asked the mignonette.

"Oh, yes, just the same as we are; only their caterpillars do much more harm in the garden than ours do; but they have the same family name that we have."

"Have you got a family name too?" asked the rose-bush, who had been listening attentively all the time but had not spoken before.

"Yes," said Orange-tip, "the family name of moths and butterflies is 'Lepidoptera,' which means 'scale-winged.'"

"That is even a harder name than Mr. Spider's," said the rose-bush thoughtfully.

"I do wish you could tell us some more about the moths," sighed the heartsease.

"I wish we could," answered Orange-tip; "but we know them so little, as it is only a few of them that ever fly by day."

"I shall certainly ask Prim to speak to Humming-bird Moth, and I shall tell her, too, that they are not butterflies which she sees at night."

"No," said Orange-tip, "they are not butterflies, for *we* are creatures of the sun. We only live a little time, but although it is a short life it is a gay and merry one."

The flowers felt very sad when they heard that their pretty visitors would only be with them for a short time.

Then the sweet-pea said softly:

"Never mind, we are such good friends whilst you stay with us, sweet butterflies, and it makes us glad and gay also to see you dance in the sunshine."

"And we, too," said Orange-tip, "should not be half so happy if it were not for the flowers, for we come to you for rest when we are tired, and for nectar to refresh us when we are weary with our sun-dances; so what should we do if you had wings and flew away?"

"If that is so, sweet butterflies," exclaimed the heartsease, "never again will we wish for wings, but only be glad and contented that we are flowers!"

Then with a flash of bright colour and a flutter of wings Orange-tip and her playmates fluttered away over the sunlit garden.



FLY WALK

SUMMARY

Two flies are buzzing about in a room to the great annoyance of a parrot, who enquires if they cannot do anything more useful. The elder fly enters into conversation with the parrot, as to the reason of the buzzing sound they make, and the latter is surprised to learn that it is caused by the rapid movement of their wings. A canary joins in and he and the parrot ask the fly a great many questions about himself and in what way he is different from the spider. They are surprised to find how beautifully the fly is made and also that he is of some use in the world.

FLY WALK

“OH! what *are* you making all that buzzing about?” cried the parrot; “you really quite make my head ache. Don’t you ever do anything useful?”

The fly stopped a moment and stood still upon the window-pane, looking at the parrot. Then he answered pertly:

“I am quite as useful as you are, and perhaps more so!”

“Hush, hush!” cried a larger fly, who was resting quietly on the brass ring at the top of the cage. “That’s not the way you should speak to your elders. It would have been more polite had you said that you were sorry that your buzzing noise annoyed Mr.—Mr.—”

“‘Prempeh’ is my name,” said the parrot, “just ‘Prempeh,’ not ‘Mister’ anything; and yours is——”

“‘Fly’ for short, but ‘House-Fly’ is my full name.”

“Ah, ‘Fly’ does nicely for me,” answered the parrot. “But what relation are you to that rude youngster?”

“Just an elder brother,” replied the larger fly.

"He is quite young and rather giddy, so you must please forgive him."

"Well, it seems to me," said the parrot, "that he wants teaching manners. I know I had to be corrected when I was little, and even now if I make too much noise I have a great cover put over me."



"Oh! what *are* you making all that buzzing about?"
cried the parrot.

"It is certainly better to be corrected when one is young, for it is not nice to grow up rude," agreed the fly.

"I am very sorry," said the little fly humbly, "but as my brother said, I am young and giddy."

"Don't think anything more about it, Buzzy," said the parrot kindly, "but be advised by your big brother, for he has lived longer in the world than you have."

"Yes," answered Buzzy, "I nearly got into trouble the other day through not taking his advice."

"How was that?" asked Prempeh.

"Brother told me on no account to go near Mr. Spider's web in the corner of the garden over by the rose-bush," said Buzzy; "but I thought I would peep in and as nearly as possible got caught, just as my poor little brother was."

"Well, it would really have been your own fault if you had been," said the parrot. "But what did the spider want with you?"

Both flies laughed, and the elder one said:

"I expect he thought the little one would make him a nice dainty breakfast!"

"You don't mean that he wanted to eat him!" exclaimed the parrot, looking quite frightened.

"I am afraid he did," said the fly. "We have lots of enemies, you know; Mr. Spider is not the only one."

"Do you really mean by enemies other creatures that eat you?" enquired the parrot.

"Yes," answered both flies together.

"Dear me! I am glad that *birds* are not like that!" he said with a self-satisfied air.

"But excuse me," said the fly, "there are many birds which are, and fish too!"

"Well, I feel quite sorry about it," said Prempeh, and he was thoughtful for some moments.

Then Buzzy said timidly:

"Would you mind if I flew about a little? Although," he added, "I am afraid if I do that I shall not be able to help making the sound which vexes you."

"Oh, fly about by all means," said the parrot, "but I cannot understand why you *must* make that sound."

"Please ask brother," said Buzzy, "he can tell you best."

"Our wings make the buzzing sound," explained the fly.

"Your wings!" exclaimed the parrot. "How strange! I thought you must be making that sound with your mouth. I really feel puzzled, for when I flap my wings they don't buzz a bit!"

"No," answered the fly; "you see, *your* wings are rather different, they are covered with feathers; ours have a very thin gauzy covering and are held out on a little frame, and when we move them very fast they make the buzzing sound."

"That's really quite interesting," said the parrot, putting his head on one side and looking at the fly. "Now when I come to think of it," he continued, "there was a little flying creature, something like you, in the land I came from. I didn't always live in a cage, you know."

"Didn't you!" exclaimed the fly in astonishment.

"Oh dear, no," he replied. "I was born in a great big forest, and came all the way over the sea in a

little cage, and when I got here I was given this nice big one to live in."

"And how do you like it?" enquired the fly.

"Very much indeed; I feel it is quite my home now, and I have numbers of friends and lots of good things to eat, so I am ever so happy. But I was telling you about that little creature, wasn't I? It used to make a humming sound; when you buzz you always remind me of it, though I don't quite know what it was called."

The fly thought a little; then he said:

"It must be a mosquito you mean."

"How do you know?" asked the parrot. "Do they live here too, as well as in my country?"

"Hardly ever, I think," said the fly; "but they are the same tribe as we are, and something like a cousin of ours, who flies about in the garden here, and whose name is 'Gnat'."

"And does your cousin hum like a mosquito?" enquired the parrot.

"Yes," answered the fly; "and he bites like him too, only not quite so hard as he does."

"You seem a large family," said the parrot reflectively.

"We are, very large," he replied; "I mean the fly family itself, to say nothing of our cousins, Gnat, Mosquito, Midge, and Daddy-long-legs."

"I suppose you are really a kind of little bird," said the parrot, "as you have wings."

"Oh, no!" cried both the flies together.

"Then what are you?" enquired Prempeh in surprise.

"We are insects," they said.

A little chirrup was heard at this moment, and the parrot and flies looked quickly round towards a small gilt cage which hung in the other window.

"Ah!" cried Prempeh; "it is you, Goldie. Did you speak?"

The canary—for it was he who had made the chirrup—answered:

"Well, I didn't exactly speak, but I called out, for I was wondering how Mr. Fly knew he was an insect and not a bird."

"That is just what I was wondering myself," said the parrot.

"Of course we know that we are *insects*," answered the fly.

"But," persisted the parrot, "the thing is, do you know *why* you are insects?"

"Yes," said the fly firmly, "I do know, although I will not pretend that I could have explained it so well to you if I had not heard something that Mr. Garden-Spider was saying the other day."

"That was when I nearly got caught in the web," chimed in Buzzy.

"Yes," answered his brother, "I saw you were going too near, and, remembering how your little brother was caught, I flew out of the window to

warn you. Then I heard the spider talking to the flowers and telling them that *he* was not an insect, so I hid myself underneath a bush, for I wanted to know what he was."

"And what did he say?" enquired the parrot, coming to the edge of the cage as he spoke.

"He began boasting first of all that he had eight legs and that insects had only six."

"And did you count your legs?" asked Goldie.

"Yes, I did," replied the fly; "just to make sure, and I found I had only six right enough."

"And when he had boasted of his eight legs, what more did he tell the flowers?" enquired the parrot.

"He said that insects were cut into three parts, but that *his* head was not clearly divided from his body, and that this was another reason why he was not properly an insect."

"But what about your body?" continued the parrot. "Is it divided into two more parts?"

"Yes," answered the fly; "see for yourself," and he came off the brass ring as he spoke and flew closer to Prempeh.

"I see your head," said the parrot, "but what are those three rings next to it?"

"That is my chest," he replied, "and if you look you will see some more rings—that is my hind body."

The parrot looked carefully, then he said :

"Yes, I see the three parts, just as you say," and

he nodded his head as he repeated, "head, chest, and hind body."

"Now look and see that he has got the six legs!" cried Goldie in excitement.

"Ah, yes!" said Prempeh. "Do you mind turning round the other way, Fly, so that I can count your legs and see that they are really all there?"

The fly obediently turned round.

"It's all right, Goldie!" he called out. "Do you remember that I said there were three rings next to his head?"

"Yes, yes!" cried Goldie, "I remember."

"Well," said the parrot; "he's got two legs on the first ring—one on each side—and two more on the next ring—how many is that, Goldie?"

"Four," answered the canary promptly.

"That's right," said the parrot; "be sure you keep count whilst I call out. Now let me see—yes, there are two more legs on the last ring. How many had we got?"

"Four," repeated the canary, "so the two on the last ring make six."

"Quite correct," replied the parrot, "four and two certainly make six. But wait a moment—what is this?"

"What is what?" asked the fly, who had been patiently standing still whilst his legs were counted.

"What are those funny little stumps with hairs on them near your last legs?" enquired the parrot.

"Ah!" said the fly, "we could not get on without those; they help us to balance ourselves when we fly, because we have only two wings, not four as some insects have. This, too, is why our grand tribe name is 'Diptera.'"

"Say that last word again, if you don't mind," interrupted the parrot, "and you might tell us what it means."

"I will spell it," said the fly. "D-I-P-T-E-R-A. The last bit of it '-ptera' means wings, and 'di' stands for two. It is quite easy really—'Two-winged'—you see, don't you?"

"Yes, I *think* I see it," said Prempeh doubtfully, "but I was going to say I should have thought two wings were quite enough for a little crea—insect like you; Goldie and I have to manage with two."

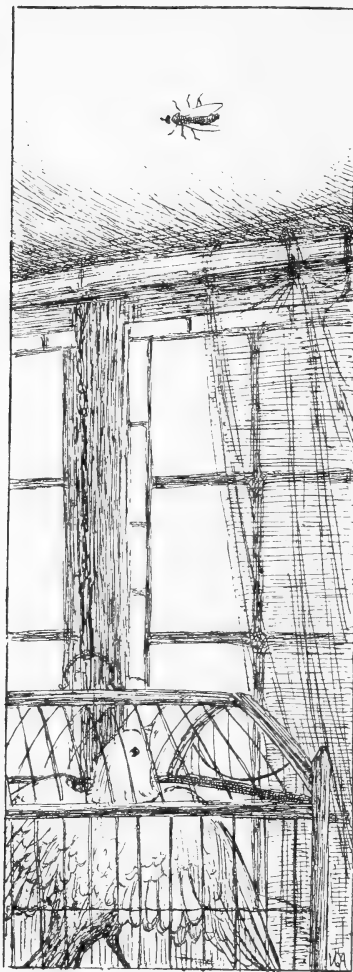
"Oh, yes," answered the fly, "we are quite satisfied with them. Now shall I turn round for you to see my wings?"

"Keep still for a minute," cried the parrot, "I am looking at your feet. You seem to have little claws and pads covered with hairs—what is the use of those?"

"To keep us from falling for one thing," he explained, "and as well as that it makes us able to walk 'upside down.'"

"Shall I show them?" called out Buzzy.

"Yes, do," said his brother. "Just show them how you can run up and down the window-pane."



"Oh! take care you don't fall,"
cried Goldie.

Off went Buzzy and did as he was told.

"There, you see," cried the fly, "he doesn't fall, because the little pad and hairs suck the air from under his feet and hold him up."

"Wonderful!" exclaimed both the birds. "Really wonderful!"

"Now, Buzzy," said his brother, "show them how you can walk upside down."

Buzzy flew up to the ceiling and began walking about.

"Oh! take care you don't fall," cried Goldie, fluttering about with anxiety.

"He's all right," said the fly, "don't be frightened. The little hairs on his feet catch on to anything that

is rough or sticking out, and keep him from falling."

"Well, I am really glad to know that it is quite safe," said Goldie, "for I watched you the other day walking on the ceiling and I felt very nervous, for I expected every moment you would fall."

The flies laughed.

"Now," said the parrot, "if you wouldn't mind turning round I should just like to see how your wings are fastened on."

The fly good-naturedly turned round at once and the parrot carefully examined his wings.

"They are joined on to the second ring, Goldie!" he called out.

"Are they really?" replied Goldie. "I wondered how they were fastened on."

"Thank you, Fly," said the parrot. "You have been most good-natured in answering all my questions."

"I have enjoyed it," replied the fly, "for I find that we are thought to be common little things not worth looking at."

"Well, I must say," said the parrot, "you have never struck me as being much to look at, but of course I think differently now that I have examined you closely and seen how beautifully you are made. Please don't fly away yet, for I am only just going to get a particular seed that I have had my eye on ever since I began talking to you."

He reached down from his perch and picked up the coveted seed, but in getting up again he dropped it.

"Dear me, how provoking!" he exclaimed, scrambling down to the bottom of his cage. "I do believe I have lost that nice seed after all. It is most vexing," he continued, as he looked about everywhere.

"There it is!" cried the fly, "down there—just underneath your drinking fountain!"

"So it is!" exclaimed the parrot, seizing upon the seed. "But how *did* you manage to see it?"

"We have such big bright eyes," replied the fly.

"Come back close to me again," said the parrot, "and let me have a look at them."

The fly returned to his former place, and the parrot, after looking at him attentively for a moment, said:

"I see that your two eyes *are* very large for your little head. No wonder you can see so quickly."

"I expect really it is having such a number of eyes that makes us able to see so well," said the fly.

"Number of eyes!" exclaimed the parrot. "What do you mean? Surely you don't call two eyes a number! You are getting a bit boastful, like Garden-Spider about his legs," he added scornfully.

"But—but," stammered the fly, "indeed I am not boastful, Prempeh. I only meant to explain that our two big eyes are made up of hundreds and hundreds of little tiny eyes."

"Dear me!" cried the parrot. "What an extraordinary thing."

"And," continued the fly, "as well as this we have three little eyes in between the big ones."

"Well, that *is* a number," said the parrot. "I must apologise for snapping you up as I did just now."

"Oh, I do not wonder you were surprised," he answered. "For such little insects we have very large eyes."

"Take a seed, Fly, won't you?" said the parrot.

"No, thanks," replied the fly, "but I should be glad of a sip of water."

"Pray help yourself, my boy," cried Prempeh, "and whilst you are doing so I will have a nut."

After a few moments Goldie asked suddenly:

"Do you and Buzzy live with your mother?"

"Oh, no," said the fly; "our mothers never have time to look after us; we have to manage for ourselves as soon as we come out of the egg."

"Are you little, like Buzzy, when you first come out?" enquired the parrot, who had finished his nut and began clambering back again on to his perch.

"We are really not a bit like flies at first," he replied. "We are just little white worms with rings and a pair of jaws like hooks."

"And no legs or wings?" enquired Goldie anxiously.

"No," said the fly, "they come afterwards."

"You could not have been pretty when you were a little worm with no legs or wings!" exclaimed both birds together.

"I am afraid I wasn't," laughed the fly good-humouredly.

"But if your mother had no time to look after you, what did you get to eat?" asked Goldie anxiously.

"Mother Fly is always careful to put her eggs where her little ones are sure to find food they can eat, so as to be able to grow," explained the fly.

"But tell us how you get your legs and wings with no mother to look after you," persisted Goldie.

"We do not get them for a time," said the fly. "First we only eat and keep growing, then we leave off eating, and rest in our grub-skins——"

"You said just now you were a worm," interrupted the parrot, "so how can you be a grub?"

"It is only another name for the same thing," he replied.

"I see," said the parrot. "Well, go on, please. You rest in your grub-skin and then——"

"It grows hard," explained the fly, "and brown, and the worm gets shut up inside it."

"I can't think how you are ever going to be a fly shut up inside there," sighed Goldie.

"Our legs, wings, and head all grow whilst we are in there," continued the fly, "and when we are ready we push and push against our hard case until at last we break it open and come out a—fly!"

"I still cannot see how you can possibly grow your wings shut up in that little case," said the parrot thoughtfully; "there is no room."

"Oh, I quite forgot to say," added the fly, "that our legs and wings are all crumpled up when we are inside that little case, but directly we get out into the air we give ourselves a good shake, and if only we are able to get into the sun its heat dries our wings and we are soon able to spread them out and fly off and begin to enjoy our life."

"Well, you are really marvellous little insects," said the parrot, "if anyone will take the trouble to look closely at you. It is only a pity that you are not of some use, instead of being merely little pests."

"But you are mistaken," said the fly; "maybe we *are* little pests, but we are of some use too, for we help, in a small way, to keep the earth clean!"

"Keep the earth clean!" repeated the birds in astonishment; "why, how do you do that?"

"By eating up lots of things which would make you all ill if they were left about. So you see we are of some use, although I know those who think we are only a nuisance and can do nothing but buzz all day," said the fly, with a sly laugh.

"Ah, now, Fly, you are making fun of me!" exclaimed the parrot, "but I have changed my opinion since we began to talk." He was silent for a moment and then he added: "And I have learnt

a lot from you, although you are only a little insect, and I am a big bird and came over the sea."

"And so have I!" cried Goldie. "Three cheers for Fly!"



ROSE-BEETLE BOWER

SUMMARY

The tall white lilies and some sweet-peas ask a rose why her lovely petals are torn. She says that the rose-beetle has eaten them, but that she is not angry with her as she is so beautiful and is named after her, and often talks with her as she sucks the honey deep down from her heart. She says that she understands she has many other relations, not so pretty as herself. She has also a dear little cousin, whom they all know—the ladybird. She is expecting them both as it is a sunny morning, and suggests that they shall each be asked to tell the lilies and sweet-peas about themselves.

ROSE-BEETLE BOWER

THE tall white lilies swayed gently to and fro in the breeze, whilst their nearest neighbours, the sweet-peas, nodded their pretty heads and whispered to each other.

"It seems such a pity," said one.

"I can't understand it!" exclaimed another.

"They were quite perfect yesterday morning," chimed in a third.

"Shall we ask her?" suggested the one who had first spoken.

"Perhaps she might not like it," replied the others.

Then they all began gently nodding their heads again, and there was silence, except for the hum of the bees as they went about their work, and the chatter of the birds in the trees above them.

At last one of them said :

"Suppose we ask the lilies what they think about it, for they live closer to her than we do."

"Yes, yes, that is a good idea!" came in a chorus from the flowers. "You ask them."

So the sweet-pea raised her head as high as she could, and her soft voice was heard calling :

"Lily-white!" But there was no answer. "Lily-white!" she called again. "turn this way, there's a dear; we want to talk to you."

The nearest lily turned her graceful head and smiled at the sweet-peas as she asked:

"Have you something nice to tell me, my little friends?"

"No," they replied, "we want to ask you something."

"Ask *me* something!" repeated the lily in surprise.

"Yes, you, Lily-white dear!" cried the sweet-peas, "for we are so worried."

"Are you?" exclaimed the lily, looking quite concerned. "What can you be worried about?"

"It is about the Rose-Queen," they said, "for see, her lovely petals are all torn! We want to know what you and your sisters think can have caused it."

The lily looked round at the rose; then she said:

"Yes, I see they are indeed torn."

"And only yesterday morning they were so lovely," said the sweet-peas; "what can have happened to them?"

"I cannot think," answered Lily-white.

"Cannot think what?" enquired her twin-sister, who grew on the same stem as herself, only just a little higher up.

"What has hurt our Rose-Queen's beautiful pink

petals," she answered; "do you not see how they are torn?"

"So they are," replied Lily-twin—as she was called by her sisters. "Who can have done it?"

"That is what we are wondering," cried the sweet-peas, "and we thought that perhaps one of you would ask the Queen."

"I will," said Lily-white, "the next time she looks my way. I do hope it will be soon."

"So do we!" exclaimed the other flowers, "for we are so anxious to know."

They waited a little, and then Lily-twin suddenly whispered to her sister:

"Now, Lily-white—quick!"

The rose at this moment was being swayed by the wind quite close to her, so Lily-white seized the opportunity and said in a respectful voice:

"Madame, may we ask you a question?"

The Queen of the garden turned her lovely face towards the flowers, and said in her pretty, gracious way:

"Of course you may—what is it, dear flowers, you would say to me?"

Then Lily-white told her how concerned they were to see her petals torn.

The Rose-Queen smiled and said:

"Ah, I am afraid that is done by a little friend of mine, who is named after me."

"Who is she, Madame?" asked the flowers.

"She is called Rose-Beetle," replied their Queen.

"But are you not vexed with her, Madame," enquired Lily-white shyly, "for destroying your lovely dress?"

"Oh, no," said the Rose-Queen. "To begin with, she is so lovely herself with her gold and green wings, and she does not understand that it spoils my dress; and as well as this, she creeps right down into my



"She does not understand that it spoils my dress."

heart and sometimes stays there for hours; so how can I be vexed with her?"

"But your lovely petals!" cried the flowers, "why should she destroy them?"

"They are her food," answered the Rose-Queen; "she has a very delicate appetite and only cares for dainty food."

"It is a pity, a *great* pity!" murmured the flowers to themselves.

"I believe she belongs to a rather large family," continued their Queen.

"And do they all eat rose-leaves?" enquired the sweet-peas anxiously.

"I do not think so," she answered, "but I really only know my little friend, Rose-Beetle, and a dear little cousin of hers called 'Ladybird.'"

"We know Ladybird," cried the flowers.

"I should not wonder, as it is so warm and sunny this morning, if they were to pay me a visit," said the Rose-Queen. "If they should come, I will ask them to tell you a little about themselves."

"Thank you, Madame," said Lily-white. "Perhaps, too, if Rose-Beetle is occupied, she will leave the rest of your lovely petals unharmed."

"Yes, yes," agreed the flowers, "we hope she will."

They had scarcely finished speaking, when the Rose-Queen's little namesake came flying along, her brilliant green and gold wing-cases shining brightly in the sun.

"Ah! here you are, little friend," said the Rose-Queen. "Now instead of creeping away and hiding as you usually do, the other flowers want a chat with you."

"A chat with me!" exclaimed the rose-beetle shyly.

"Yes," said Madame, "they are just a little vexed with you for spoiling my dress yesterday."

"Are they?" said the rose-beetle, looking timidly round at the lilies and sweet-peas. "Are you vexed with me too, dear Queen?"

"No," said Madame gently, "I do not mind, because you are my little friend."

The rose-beetle gave a sigh of relief, and turning again to the flowers, said :

"Please forgive me, I did not intend to tear the Queen's beautiful dress, but you see I am an *eating* insect."

"What do you mean?" enquired Lily-twin. "Surely all insects eat, or they would die?"

"Not so at all," answered the rose-beetle, "many insects *drink* their food. Your friends the bees and butterflies get their food by sucking it."

"They never, never destroy our Queen's dress," chimed in the flowers reprovingly. "They only sip the nectar."

"I also suck the honey," said the beetle ; then she added, looking rather ashamed, "but I have such a delicate appetite that I—I—chew the petals too, and I am afraid that this is how I did the mischief."

"I am afraid it is," said Lily-white, drawing herself up and looking very dignified ; "but if you cannot eat anything else I suppose it cannot be helped."

The sweet-peas saw that the poor little beetle was very sad and ashamed, so they said kindly :

"Our Queen says that you belong to a large family, and she promised if you came this morning that she would ask you to tell us something about yourself and your relatives."

"Yes," said the Rose-Queen, "you might tell them first what you whispered to me one day all about where Mrs. Rose-Beetle lays her eggs, and how long you take growing into such beautiful insects."

"There is nothing very beautiful about us at first, I can assure you," laughed the beetle ; "we are just nasty, fat, round white worms ; our heads are a pale brown colour, and we have a thin skin, with some hairs on it."

"But you have not told us yet where Mrs. Rose-Beetle lays her eggs," interrupted the sweet-peas.

"I was forgetting that," she replied. "She finds a nice place at the foot of a tree, then she goes down into the ground all amongst the roots of the tree, where the wood is nice and soft, and she puts her eggs there, between the wood and the bark."

"But how can the little beetles ever get up here?" enquired the flowers anxiously.

"The little grubs—that is what we are called first of all—never do come up here," said the rose-beetle.

"But there is nothing for them to eat down there," exclaimed the lilies.

"Oh, yes, there is," replied the beetle—all that they want—for I expect you will be surprised to hear what they live on. Try and guess."

"On ants," hazarded one of the sweet-peas timidly.

"Not a bit of it," replied the beetle; "they live on leaves and soft wood—what do you think of that?"

"It seems strange sort of food," exclaimed the flowers.

"Talking of ants, though, reminds me," continued the beetle, "that sometimes our mothers put their eggs in an ants' nest; however, they are very kind, and do not seem to mind this. But I expect you want to hear what the grubs do under the ground?"

"Yes, please," cried the flowers.

"Well, I am afraid they are very lazy," said the beetle, "they do nothing but eat. When it is cold and frosty, they dig down deeper into the earth to keep warm, and go to sleep until the spring comes."

"And then have they turned into beetles?" enquired the flowers.

"Oh, no; they go on living like this for two or three years. Then at last one day they make a ball of dead leaves and grass, or bits of wood they have cut up——"

"But how can they cut it up?" enquired the flowers, who were by now deeply interested in what the beautiful little beetle was telling them.

"With their jaws, which are very strong," was the answer.

"And when they have cut it up, what then?" asked Lily-white.

"They fasten it all together with glue from their mouth, then they get inside and shut themselves up in the little ball or case."

"Now I expect they are going to be beetles," whispered one sweet-pea to the other in excitement.

"Not quite yet, Miss Sweet-pea," said the beetle, who had heard what was said, "their legs and wings have to grow first, you know."

"Oh, yes," replied the sweet-peas, "we were forgetting that. Do they grow while they are in their little case?"

"Yes," answered the beetle, "and one fine warm day they come out, looking—well, better than when they were grubs," he added modestly.

"Looking lovely!" cried the flowers, "in their beautiful suit of green and gold."

"I am glad you like our suits," said the beetle shyly.

"We do, we do!" cried the flowers; and the sweet-peas began nodding their pretty heads again with pleasure.

"There is one thing I want to ask you," said Lily-twin, "and that is—why you have two pairs of wings."



“My flying wings come out from underneath, like this——”

“The top ones are only wing-covers,” answered the beetle, “we fly with the underneath pair.”

“The wide, thin, gauzy-looking ones, you mean,” said Lily-twin.

“Yes,” she answered; “you see I only tip my wing-cases, so——” and she proceeded to show them what she meant. Then she continued: “My flying wings come out from underneath them, like this——”

“Oh! oh! oh! please, *please* do not fly away!” exclaimed the flowers in agitation, for the pretty little beetle had got her flying wings outspread, as though ready for flight. “We have lots more to ask you,” they cried.

“I was not going, I was only showing you,”

replied the beetle, well pleased that the flowers seemed getting so friendly.

"And Madame tells us that dear little Ladybird is a cousin of yours," said Lily-white.

"Yes," said the beetle, "she is one of the COLEOPTERA family."

"I know what '-ptera' means!" exclaimed the eldest Miss Sweet-pea in excitement.

"Do you?" said the beetle.

"I do really," she answered. "It means 'wings'—but I do not know the other word," she added in a disappointed voice.

"That's to do with the wing-cases," explained the beetle, "and means 'sheath'—'sheath-winged.' Ah, here comes Ladybird!" she exclaimed. "Now you watch her, and you will see that she has wing-cases too, but she flies with her lower pair of wings."

As she spoke, Ladybird alighted gently upon the Rose-Queen, who greeted her affectionately.

"What were you saying about my wings?" she asked the beetle, when she had returned the Rose-Queen's salutation.

"I was only telling the flowers that you belong to the same family as I do," replied the beetle.

"Ah! but I have not such a grand suit as you have, cousin," answered the Ladybird.

"Never mind," said the flowers, "you look very smart with your nice red wing-covers spotted with

black, and you are a dear little thing, and very useful into the bargain."

"Very useful!" exclaimed the rose-beetle in surprise; "how is Ladybird useful?"

"Why, she is always eating up the little creatures which destroy plants."

"And so do *our* grubs," chimed in Ladybird. "The mothers of our family always put their eggs near where these little creatures are, and the grubs climb up the stalks and eat them."

"Then you do not live under the ground when you are a grub, as Rose-Beetle does?" enquired the sweet-peas.

"Oh, no," replied the ladybird, "we live on the plants, and after a while we glue ourselves to a leaf by our tails, and hang head downwards, until one day we become a ladybird, and off we fly."

"And it is then you begin to be useful, I suppose?" enquired Miss Sweet-pea.

"Yes," answered the ladybird. "Do you see the old apple-tree over there?"

The flowers nodded their heads.

"Well," she continued, "just under a loose bit of bark, at the foot of that tree, some of those mischievous little green-fly laid their eggs, and out they came in the spring, but we ladybirds were ready for them. A number of us were watching, and directly they appeared we ate up the grubs."

"You certainly are useful little insects," said the rose-beetle.

"Insects!" exclaimed the sweet-peas. "Ladybird is an insect too," they said, looking at each other. "Do you remember we heard Mr. Spider explaining that day why he was *not* an insect?"

"Yes," answered another sweet-pea, "he was telling how proper insects are divided into three parts. Are you divided properly, Ladybird?"

"Yes," she replied, "and so is Rose-Beetle, and we have six legs, and our wings, which are fastened on to the upper part of our chest, fold down over the back part of our body."

"And what about your eyes?" enquired the flowers, "for you must want sharp ones to see those mischievous green-flies."

"Our eyes are something like House-Fly's; we have two big ones, just as he has, made up of numbers and numbers of little ones."

"No wonder you can see so well," said the flowers. "Do all your family have eyes like that?"

"Yes," said the ladybird; "and some of our relations have two small eyes at the back of their head as well."

"I think, Ladybird," suddenly said the rose-beetle, "before we go, we ought to tell the flowers that all our relations are not so small as we are; some of them are very big, and some carry weapons."

"Yes," replied Ladybird, "our Cousin Stag-Beetle



The little Sextons.

is very big. He has strong jaws for cutting up leaves and wood, and he can pinch hard with them when he wishes. But there is one thing I do not like about him," she continued, "he is so fond of fighting with his jaws, which are like two horns."

"And he beats his cousins without horns," laughed the rose-beetle.

"Then there is Cousin Sexton-Beetle—he's rather large."

"What a strange name!" exclaimed the flowers. "Why is he called so?"

"Because if he finds a dead bird, or mouse, or any little animal, he buries it," replied Lady-bird.

"What a clever beetle!" cried the flowers. "How does he do it?"

"He digs with his head all around in the earth, and the little dead body sinks in, then he puts the earth all over it, until it is quite covered up," exclaimed the rose-beetle.

"Now tell us about the cousins who carry weapons," begged the flowers.

"There is one family that carries a gun," said Ladybird. "Near their tail is a little bag full of fluid. They can throw out a drop of this fluid as they run. It sounds like a tiny gun going off bang! As it flies out of the bag it makes a little smoke."

"But what do they want guns for?" enquired the flowers.

"Well, this beetle is only a little fellow," explained Ladybird, "and big beetles like to chase him, but when he pops his gun off in the big beetle's face the latter runs away."

The flowers rustled with amusement at this little story, and cried:

"Tell us more, please, more! It is so amusing."

"Tell them about our water relations, Ladybird dear," said the rose-beetle. "They have a lovely home in the water and float on lily leaves."

"Ah, Cousin Water-Beetle has a glorious life—but his body is made a little differently to ours," explained Ladybird, "the parts fit more closely, so as to make them watertight. His wing-covers, too, are airtight, because he lives in a water home."

"But how can he breathe in the water?" asked Lily-white anxiously.

"He comes up to the top, opens the breathing tubes under his wing-covers, and draws in some fresh air, then he shuts his wing-covers up tight and goes down again with plenty of fresh air to breathe."

"But doesn't he ever use his wings to fly with?" enquired the flowers.

"Oh, yes," said the rose-beetle; "on fine nights he flies up into the air, then when he has had enough, he turns, closes his wings, and drops into the water with a splash."

"There is Glow-Worm too," said Ladybird.

"Oh, we know Mr. and Mrs. Glow-Worm!" cried the flowers. "Are they really relations of yours also?"

"Yes," said the rose-beetle; "we are very proud of them, because of the bright light they can give—they are the only ones which can do so."

"We could tell you lots more about our relations," said Ladybird, "if only we had time, for there are hundreds and hundreds of them."

"Hundreds and hundreds?" repeated the flowers rather doubtfully.

"It is quite true," exclaimed the ladybird and rose-beetle together; "we are not exaggerating."

"Now," said Ladybird, "I really must go, but there is just one thing that I would like to say; it is this—

if Rose-Beetle does sometimes spoil your Queen's dress, because she has such a dainty appetite, we, her cousins, at any rate make up for it, by destroying the little creatures which would eat up all your leaves, so that you would not have any left if it were not for us—the Ladybirds: so you must please forgive her.”

“We will, we will!” cried the flowers, and as their tiny friend and ally flew off they added: “Come again soon, little Ladybird.”



“Come again soon, little Ladybird.”

WASP CASTLE

SUMMARY

A robin begs a wasp not to be so greedy, but to leave him some of the raspberries and pears. He then goes on to ask him if he has a Queen, like the bee; the wasp says that he has not, and tells something of his life and habits.

WASP CASTLE

A PAIR of bright eyes peeped out from amongst the branches of the big old apple-tree, and watched the wasp who was helping himself to the pears on the next tree. Then the owner of the eyes hopped up one branch higher. At last he could stand it no longer, and cried out :

"Come, come! leave *some* fruit for the rest of us!"

The wasp looked round.

"Well, Master Impudence," he said, "and pray does this garden belong to you?"

"No, it does not," replied the robin, "nor to you either; but there is one thing—I have more right here than you have, for the gardener is a friend of mine."

"Is he?" said the wasp, returning to the pear he was busy on.

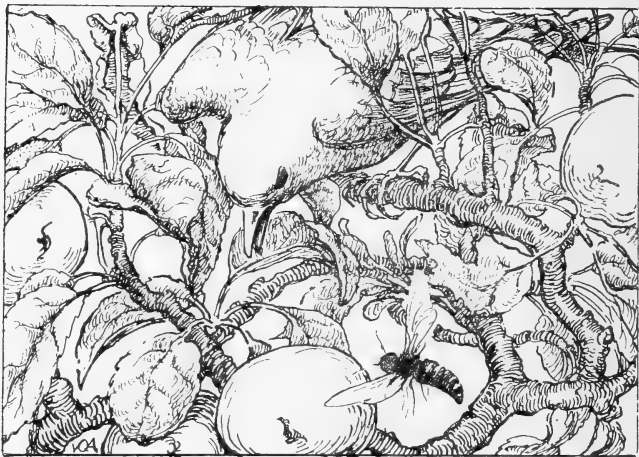
"Yes, a great friend," continued the robin, "and a very kind man he is too; he turns up the worms for me." Then he added with glee, "But he does not like you, because you spoil the fruit."

"Not like me indeed!" exclaimed the wasp. "I expect he's afraid of me because I carry a sword."

"A sword!" cried the robin. "I cannot see it!"

"No; but although you do not see it, Master Impudence, you had better take care that you do not feel it."

"What is it for?" asked the little bird cheerfully.



"Come, come! leave *some* fruit for the rest of us!"

"To fight with, of course," said the wasp sharply.

"Dear me!" he answered thoughtfully; "I suppose you have a lot of fighting to do, then? We robins fight sometimes; in fact, my friend, Mr. Gardener, says it is the only thing he does not like about us; but we have no swords, we use our beaks. Haven't you got a beak?"

"No," said the wasp, "and that is another reason why we carry a sword; we use it to kill things to eat."

"I see," said the robin. "Are you using it now to kill the pear with?"

"How silly you are!" retorted the wasp crossly. "Of course I am not. We use it when we want to kill insects to eat."

"Insects!" exclaimed the robin in surprise; "but I thought you were an insect yourself!"

"So I am," he replied, "but we eat other insects. You seem so inquisitive, I should have thought you would have known that."

"Now, dear boy, do not be so cross," said the robin pleasantly; "it is not that I am inquisitive, but I want to know about everything. How do you think I know that you are an insect?"

"I am sure I *don't* know," replied the wasp.

"Well, I heard the spider boasting about his eight legs, and saying that he was not an insect, but that you were."

"Did you?" said the wasp, showing some interest for the first time. "I suppose he did not say that he was afraid of my sword."

"No," replied the robin. "I did not hear him say that."

"Well, then, I can tell you he is. If any of our family get into his net he runs out to have a look directly he feels the web shake, but when he sees our striped

coat, away he runs again as fast as possible, unless he is very, very hungry."

"No, he certainly did not say anything about running away," said the robin. "I heard him, though, telling what a long name he had got. I cannot quite remember it, but it was a something——"

"Oh, yes," interrupted the wasp, "I know; but that is nothing. *Our* family name is much longer."

"Oh, do tell me!" cried the robin.

"You would never remember it if I did," was the reply.

"Yes, yes, I should, if you said it very slowly," replied the robin excitedly.

"Well, it is 'Hymenoptera,'" he said very fast.

"Oh, do say it slowly, there's a dear!" pleaded the robin, "and tell me what it means."

"H-Y-M-E-N-O-P-T-E-R-A," he said, spelling it very slowly, "and it means we have wings that you can see through." Then he added sharply, "What more do you want to know?"

"Oh, lots of things," he replied, "but when you seem so disagreeable I can't remember them. You really look so nice in your striped coat that it seems quite a pity you are so cross, for it is no use being handsome if you have not polite manners as well."

"Indeed, indeed!" cried the wasp; "you seem to think a lot of yourself, Master Impudence."

"Oh, no, I don't," answered the little bird. "By

the by, my name is not 'Impudence,' I am 'Robin'—'Robin Redbreast,' you know."

"Oh, yes, I know you," answered the wasp sourly; "you are always hopping about; you seem to have nothing to do."

"I can assure you I have," he replied quickly; "and Mrs. Robin Redbreast is very busy, when there are little ones to look after. Is Mrs. Wasp a good mother?"

"She is indeed, there could not be a better," he replied. "The queen-wasp——"

"Oh! you have a queen then, as the bee has?" interrupted the robin excitedly.

"Yes, all the mothers of our family are queens," he answered.

"Just the same as Bee's," cried the robin, and he began to hop about.

"Steady now!" said the wasp. "Not 'just the same'—because they are different!"

"But how *can* a queen be different?" he enquired.

"Well, if you are patient I will tell you," said the wasp. "Our queen has to do all the work by herself at first. She has to find a nice place, then build a home and look after her family. The queen-bee does no work—she only goes out once—and has slaves to wait on her."

"Do tell me how your queen builds her house all alone, and what she gives her little ones to eat, and——"

"Not so many questions at once, please," said the wasp severely. "Ah! there is my Cousin Hornet! I will ask him to come and help me, for I am really quite tired, you want to know so many things."

The hornet—after stopping a moment to refresh himself at the raspberry-bush close by—joined the wasp on the pear-tree.

"Good-day, Cousin," he said, "those raspberries are so refreshing."

"Yes," answered the wasp, "although I like these pears best myself. Not that I have had a chance of getting much of anything, for Impu—I mean Robin Redbreast—wants to know so many things about our family."

"Does he?" said the hornet. "Well, you are wonderfully industrious, Cousin; he might do worse than want to know about you."

The robin was delighted, and sang a little song to himself whilst the cousins talked.

"A glad and happy bird am I,
'Neath summer sun or winter sky :
'Tis said—I'm brave and merry too,
That you love me and I love you.

"Ere yet doth break the rosy dawn,
My song is heard to greet the morn—
And 'tis not till the setting sun
That Robin Redbreast's song is done.

"Perchance—if your cold wind doth blow—
I from you for a space must go,

Yet scarce a month e'er passes by,
But backward home again I fly.

"Pray tell me—are you glad when he—
Your Robin Red—comes back to thee?"

"Thank you," said the hornet, "you sing very prettily.—Does he not, Cousin?"

"Not amiss!" replied the wasp.

"I was only singing to myself," said the little bird modestly. "I felt so pleased when Hornet said there was no harm in my wanting to know about your family."

"And what is it that you want to know?" enquired the hornet.

"About the queen building her home and——"

"Now, Cousin," said the hornet, "you tell him about your part of the family, and then I will tell him about mine, whilst you go and have some raspberries," and he gave a sly look towards the apple-tree as he spoke.

The robin was so pleased and excited that he nearly fell off the bough on which he was perched. The wasp took one more bite of the pear, and then said :

"The queen-mother hides away all the winter, but one warm spring morning out she comes and looks for a nice hole to build her new house in."

"She does not build it in a tree, then?" exclaimed the robin in surprise.

"No," he replied, "not *our* mothers, because we are ground-wasps—there are some relatives of ours who are tree-wasps. I will tell you about them later on."

"Oh, thank you," cried the robin ; " I did not know ; I thought that all wasps were the same."

" There are six different branches in your family, are there not, Cousin ? " put in the hornet, " and I am a seventh kind—a great big fellow, much larger than the rest of you."

" Quite right," agreed the wasp.

" And when the queen-mother has found a hole, what does she do next ? " enquired the robin.

" She creeps into it, and makes it larger by biting the earth and pushing it away with her feet. Then she goes out and collects either little bits of wood off trees and posts, or else grass, leaves, or rushes."

" But how can she get the wood off ? " enquired the robin.

" She scrapes it with her jaws," he explained, " then she rolls it up into a neat little bundle, which she tucks under her jaws, and flies back to begin building her home."

" I expect she is tired by then," said the robin.

" She is," agreed the wasp, " so she rests a little, then she sets to work, and with a kind of glue out of her mouth, she makes what she has brought, into paper."

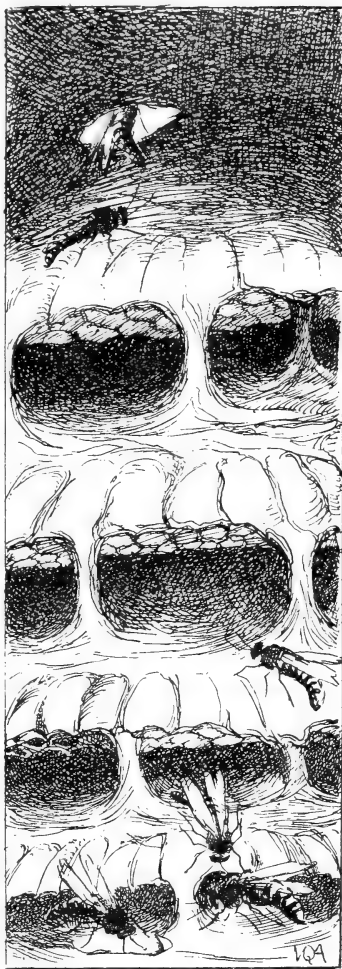
" Paper ! " cried the robin ; " I can hardly believe it."

"We all make paper," said the hornet, with a little pride in his voice, "but of different kinds."

"How wonderful!" exclaimed the robin. "Oh, tell me, Wasp, what does she do next?"

"She fixes what she has made firmly into the top of the hole, and fastens it, with more glue out of her mouth, to the root of a plant or stone; then she walks slowly backwards, unrolling the little ball of paper as she goes and spreading it out. When she comes to the end of the roll, she runs forward and does the same thing all over again several times, until she has made her roof quite flat and smooth."

"That *is* clever," said the robin in wonder. "Oh, do go on, please."



The Ground-Wasp's nest.

"Then she goes out again and collects another little bundle to bring home, with which to build some cells under her paper roof."

"And what are the cells for?" asked the robin breathlessly.

"She lays an egg in each one, and glues it in; she also puts in a little food."

"Then I suppose she rests?" said the robin.

"Not a bit of it," cried the hornet and wasp together; "she is busier than ever, for soon her first eggs hatch and she must feed her little ones as well as go on with her house-building."

"What does she give them to eat?" enquired the robin anxiously.

"Oh, spiders—nice fat ones—and caterpillars, and those little green flies which spoil the plants——"

"I know, I know!" interrupted the robin excitedly. "I heard Ladybird talking about them—she told the flowers how she and her relations watched for those little insects at the foot of this very tree I am perched on. What else does she give them?"

"Honey," said the wasp.

"Honey!" repeated the robin; "I had no idea you made honey too!"

"No——" said the wasp, rather hesitatingly, "we——we——"

"Better tell the truth, Cousin," put in the hornet. "They steal it!"

"That seems a pity," said the robin.

"Not at all," answered the wasp sharply. "The grubs must be fed," and he looked fiercely at the robin, who saw he must be careful, so he said :

"Yes, of course," and hopped a little further away.

The hornet, seeing that the wasp was getting cross again, said quickly :

"But tell Robin that our family do not steal the wax they use for putting lids on the cells."

"Oh, no, we make that ourselves," replied his cousin, "as well as varnish to keep the cells dry."

The robin thought he might now venture to speak again, so he enquired rather timidly :

"Did I hear you say just now that you were grubs before you were wasps?"

"Yes," he answered, "but we have no legs or wings. Our mother feeds us with honey and insects; then we spin little silk cases which protect us whilst we are growing our legs and wings, and at last we come out of our cells—full-grown wasps."

"Then do you help your mother?" enquired the robin anxiously.

"Yes," said the wasp; "we fly about for food, and collect materials for our paper. As well as this we go on building the house, making it larger and larger, and we feed the grubs—indeed, we work *very* hard."

"And what does the Queen-mother do?" was the robin's next question.

"She only lays the eggs," was the reply, "whilst we young wasps go on building the house bigger and stronger and making larger cells for the queen-mother to put her eggs in."

"But how do you make the house bigger?" asked the robin.

"Well, when we have finished one paper roof full of cells, we make another underneath it."

"Underneath it!" exclaimed the robin in astonishment. "I cannot understand how you do that!"

"I don't suppose you can," replied the wasp sharply, "and you never will, if you keep on interrupting."

"I am so sorry; I will shut my beak up tight and only keep my ears open," he replied.

The wasp took no notice of this remark, but continued:

"We make little gluey pillars under the first roof to hold it up, and to fasten the next roof to. Do you understand?"

The robin nodded his head.

"And so we go on," explained the wasp, "until we have made as many as we want—sometimes seventeen or eighteen."

The beak was wide open now, and exclaiming:

"Dear, dear me! It is wonderful! I shall tell Mrs. Robin about it. Oh, I must speak now," he went on, for he saw the hornet and wasp look at each

other. "I am tired of keeping my beak shut, and besides, too, I so want to know what you do when the house is all finished, for it must take a long time to make it so large."

"By then it is drawing near winter, and when it gets cold and wet we die. Only the queen-mothers go and hide away and sleep until the next spring."

"Oh, what a pity!" cried the robin; "your beautiful home is of no use then?"

"None at all," said the wasp, "for the little creatures who made it are nearly all dead."

"I *do* feel sorry," said the robin regretfully.

"Now you go and have your raspberries, Cousin," called out the hornet, "whilst Robin and I have a little talk."

"Yes," put in the little bird, "but be sure and come back again, because I do so want to ask you more about your sword."

The wasp felt better-tempered now, so he answered more pleasantly, that he would soon be back, and then off he flew to the raspberry-canes.

When he had quite disappeared the robin hopped a little closer to the hornet and said in a whisper:

"Wasp is rather sharp-tempered, is he not?"

"Well, I am afraid he is," agreed his cousin, "but he is all right if you leave him alone. Now what shall we talk about?"



The Wood-Wasp's nest.

"Please tell me where you live, and if you make paper—and—— Oh, I forgot, I must not ask so many questions at once. I think I should like to know——"

"About the paper?" suggested the hornet. "We make that too, but it is much thicker and not the same colour as Wasp's, and we glue ours together before we roll it out."

"And where do you live and build your nests?" enquired the robin, who was now thoroughly enjoying himself.

"Very often in the hollow of an old tree," he answered. "By the by, I expect you know a little relation of ours, called Wood-Wasp, for she builds her nest under the bough of a tree."

"Yes, yes, I know her,"

said the robin, "and there is another wasp who steals a lot of caterpillars—I have seen her take them—who is she?"

"Ah, that is Wall-Wasp," answered the hornet. "She is a clever little insect and is one of the solitary wasps."

"I don't know what that is," said the robin.

"Well," explained the hornet, "the members of our family who live alone are called 'Solitary'—that means lonely—and those who live with their families are called 'Social.'"

"But why does Wall-Wasp take so many caterpillars?" persisted the robin, for this interested him much more than about "lonely" wasps.

"Because she is such a careful mother," replied the hornet. "When she has laid her egg, she puts caterpillars, flies, and spiders, all ready in the nest for her little ones to eat. Then she fastens the door with a lump of mud and goes away."

"Does she never come back again?" asked the robin in surprise.

"No, never," said the hornet; "but when the little wasp grows big he bites his way out through the door. There is lots more I could tell you, but I see Wasp coming back."

"How funny he looks," whispered the robin, "just as if the back of him would fall off."

"Do not let him hear you say that," continued the hornet, "for he is very proud of his nice figure and

small waist, and it shows too that he is a proper insect—the body in three parts, you know. We are also very proud of belonging to the Hook-wing order.”

At this moment the wasp joined them and asked :

“What was that about the Hook-wing order?”

“I was just saying,” responded the hornet, “that we are very proud of belonging to that order.”

“I should just think we are,” said the wasp, “for we Hook-wings are the chief of all the insects.”

“Who are ‘we’?” asked the robin.

“Bee, Ant, Saw-Fly, and ourselves,” replied the wasp. “You will always know us, because our front wings are larger than the back ones; they lie over them when we are still, but when we fly the under ones hook to the upper.”

“Oh, now I see why you are called Hook-wing insects. Do you hook anywhere else?”

“No, but we are made so that we can bend our bodies, or, in fact, nearly double them up, if we want to, in our work,” said the wasp rather importantly, “and as well as that we can sting.”

“Sting!” cried the robin; “that is your sword, then! Just tell me what it is like and I will not bother you with any more questions.”

“There are two sharp points, like tiny saws,” explained the wasp, “which we prick with, and a drop

of poison runs into these points from a bag at the back. There is also a little case in which they are kept when we are not using them."

The robin was much interested.

"I suppose, then," he said, "that is how Wall-Wasp kills the caterpillars?"

"She does not kill them," said the hornet, "she only stings them, so that they cannot get away."

"Well, I only hope that I shall remember all that you and Hornet have told me, for I am sure that Mrs. Robin would like to know about you clever little paper-makers."

"Yes, we make the best paper of all the insects," cried the wasp and hornet together, "never forget that!"

"Indeed I shall not," replied the robin. "Now I must go, for I see Mr. Gardener over there, and perhaps he has got a nice worm ready."

"You might tell your friend from me," said the wasp, "that he need not grudge us a little of the fruit which we help to secure for him."

The robin, who was just starting to fly away, paused for a moment.

"How is that?" he enquired, with a puzzled look.

"When our queens come out in the spring they demolish numbers of those little green flies which would otherwise spoil the fruit trees—so we have a right to some."

“I will be sure and tell him,” said the robin; then he added with a roguish look: “But when you take your share of the fruit do not forget to leave *some* for Robin Redbreast!” and away he flew.



DRAGON-FLY POOL

SUMMARY

The water-lilies and forget-me-nots enter into conversation with a flowering rush and ask what is the curious insect they see creeping up its stem. The rush says it does not know. So they watch until the insect, to their surprise, turns into a dragon-fly. They tell the latter how astonished they were when they saw this happen and ask him where he came from. He relates how he has lived for two years, whilst he was growing, at the bottom of their river.

DRAGON-FLY POOL

THE water-lilies smiled to themselves as they floated on the pool and watched the sun coaxing their buds to open out. The forget-me-nots, too, were glad to be alive, and lifted their little star-like faces to be also kissed by the sun ; whilst close by, a tall flowering rush bowed her head this way and that, as the wind passed over it.

Presently one of the little blue flowerets whispered to her nearest companion :

"Look at that curious thing on the stem of the rush ! what is it ?"

"I do not see anything," replied the floweret addressed.

"There, there !" cried the first speaker ; "high up the stem, a good way above the water. It looks like a bit of wood."

"Oh, yes, I do see it now," answered her sister in an excited voice ; "but I cannot think what it can be."

"Nor I, nor I !" came in a chorus from the other flowers, for it appeared that several of them had been watching this curious-looking object crawling out of the water, up the stem of the rush.

"The only thing is to ask someone bigger and wiser than ourselves," suggested the forget-me-not who had first spoken.

"Yes, yes," cried the flowerets, "suppose we ask the water-lilies."

So they gave their message to a little ripple in the water, who danced across with it to the water-lilies ;



"I cannot think what it can be."

but they went on smiling and rocking themselves gently, and the wind brought back word that they did not know, but suggested that the forget-me-nots should ask the rush.

This they did, but the rush replied that she did not know either. She had been wondering herself, she said, what was creeping slowly up her stem.

Then they talked it over together and decided

they would all watch carefully, and whoever saw anything first was to call out to the others.

They had not long to wait, and it was the water-lilies who, after all, gave the signal. The largest one suddenly stopped rocking and cried out :

"Look, look, flowerets! It is breaking open!"

"So it is!" they exclaimed together. "And see! something is coming out!"

They watched breathlessly, and saw the strange-looking thing twisting itself this way and that, and one of the little blue blossoms whispered to her friend in an awestruck voice :

"It is alive!"

Then another cried :

"Now it has got wings!"



"And see! something is coming out!"

"Look!" exclaimed a third, "it has a long body and legs—what can it be?"

But at this moment it stopped wriggling and twisting, and the flowerets whispered:

"Whatever it is, it is dead now, for see, it is quite still," and they felt very disappointed.

Suddenly, to their astonishment, it began to move again, and a few moments later only the case was left hanging upon the rush, whilst a little lower down the stem a great insect was seen to be clinging.

The flowers scarcely breathed, but murmured to each other:

"Is it asleep, or is it really dead now?"

As they spoke there was a little quiver of the wings—then these spread out in the sun, and as the flowers watched them they seemed to grow beautiful and gleam with lovely colours in the light.

"See his big eyes!" they whispered. "Still he does not look as if he were awake!"

But before long the big eyes began to grow bright, and then it was that one blue blossom—braver than the rest—called up to him:

"If you are awake now, do you mind telling us who you are?"

The great eyes looked at her, and frightened at her own boldness, the blossom drooped her head.

Then the insect said slowly:

"I—am—a—DRAGON-FLY!"

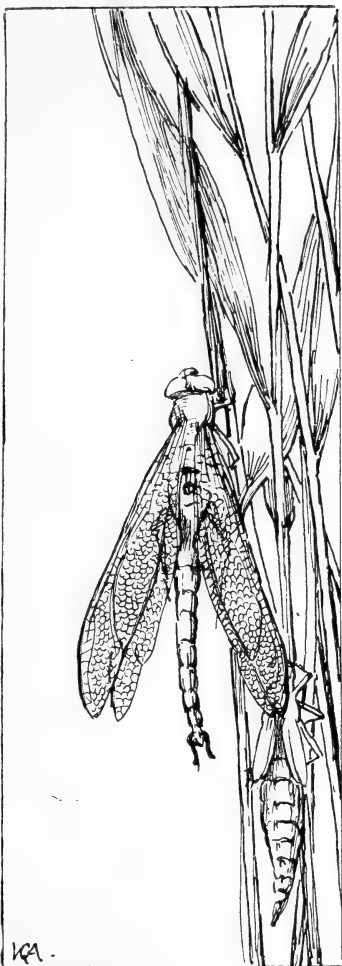
"Oh!" cried the rush,
"I know you now—you
are one of those beautiful
insects which look
like a flower with wings."

"I expect I shall look
beautiful presently," he
replied, "when the sun
has dried me and
brought out my fine
colours; but I shall have
to stay here for an hour
or two until my wings
are strong enough to fly
with."

"We shall like watching
you get your colours,"
came in a chorus from
the flowers.

Just then another dragon-fly
flew past, with all his
brilliant colours flashing
in the sun. He hovered
for a moment upon one
of the rushes and said:

"Well, and how do
you like being up here
instead of down below?"



"I—am—a—DRAGON-FLY!"

"I think I shall like it very much when my wings are ready to use," was the reply.

"That you will!" cried his friend, as he went on his way.

"Where did he come from?" whispered the flowerets in excitement to each other. "You ask him," they said to the rush.

But the dragon-fly—who was getting stronger every moment—had heard, and answered:

"Why, from the bottom of your pool to be sure—that is where I came from."

"The bottom of our pool!" they exclaimed. "Have you been there long?"

"Yes, for two years," he replied.

"What were you doing down there all the time?" asked the rush.

"Growing," answered the dragon-fly.

"But what did you grow out of?" enquired the flowers eagerly.

"Out of an egg," said he.

The flowers looked puzzled, then one of them remarked:

"It is very strange—I never knew that eggs could be at the bottom of a pool. Mrs. Lark's little ones come out of an egg, but then she has a nice nest."

"Ah," said the dragon-fly, "our mothers do not have nests; they drop their eggs into the water and they sink right down to the bottom."

"But I wonder they do not get lost," put in the rush.

"No, they are quite safe," answered the dragon-fly, "unless of course a beetle or some other enemy eats them up; this does happen sometimes, but not as a rule."

"And then?" the rush enquired.

"Why, then the little nymph——"

"Nymph!" interrupted the flowers; "but we do not know what that is. Please tell us."

"Oh, it is only the name we are called by, from the time we come out of the egg until we get our wings."

"Is it anything like a grub?" suddenly asked one of the water-lilies; "because we know what that is."

The dragon-fly looked round, and when he saw the beautiful floating flower smiling up at him, he answered with great respect:

"It is only another name for a grub, and as you know what that is, we will call it so."

"Thank you," said the water-lilies, and they settled themselves quietly down to hear what the dragon-fly had to tell.

"I was going to say," he continued, "that the grubs soon come out."

"What are they like?" enquired the forget-me-nots.

"They are a grey colour and have six legs and are always very hungry," was the answer.

"I suppose they soon use their legs to run about with and look for food," said the rush.

"Not at all," replied the dragon-fly. "They hide under a leaf or stone in the water and keep quite still until they see an insect or other little creature come along ; these they catch as they pass."

"But how can they catch them without moving?" was the anxious enquiry.

"They have a thing called a 'mask,' which is fastened by a little hinge to their lower jaw ; this they can shoot out suddenly, and with the sharp teeth on its edge, can seize the creatures as they swim along."

"Unless the creatures get out of their way," interrupted the flowers.

"Ha, ha!" laughed the dragon-fly, "but they can reach much farther off than you think. Then the sharp teeth shut up, the mask folds back, and down the throat of the hungry grub goes the poor little victim they have caught."

"And is that what you have been doing all this time?" asked the little blue blossoms in frightened tones.

"Yes," replied their visitor ; "eating and moulting—we change our skins a great many times, you know—and as we moult, we get more and more hungry."

"And do you get to look any different?" enquired the rush.

"No, we do not change in our appearance so much as many insects do; but would you like me to tell you what we are like just before we come up here?" asked the dragon-fly.

"Please, please!" cried his listeners.

"Well, we have the case you saw me come out of and six legs, and on each foot there is a strong hook—now guess what these hooks are for."

There was a silence for a moment, and the flowers shook their heads in bewilderment.

Then the rush said quietly:

"I think I know—you use them when you want to climb up a stem."

"Quite right," said the dragon-fly. "They are so sharp that they will even pierce wood, and as well as this we can hold on firmly whilst we twist and turn to get out of our case."

"But how do you know you want to come up here instead of staying on, down in the pool?" enquired the water-lilies who had been listening attentively.

"We begin to feel tired," replied the dragon-fly, "and are not as hungry as we used to be. Then, too, we cannot breathe so well in the water as we did before, and feel we want the air."

"Ah!" said the rush, "talking of breathing—I do so want to know how you can breathe at all under the water."

"We have a long tube through our body, which

comes out in a point at our tail—this can be opened or closed at will,” explained the dragon-fly. “When it is open we draw in water to breathe with, and when it is closed up in a point we can shoot the water out again, and at the same time it pushes us across the pool.”

“Well, that is really wonderful!” said the rush thoughtfully. “But,” she added politely, “I interrupted you, just when you were telling us about wanting to come up to the air.”

“Yes, I was saying we feel tired and long to fly instead of only being able to run about; so we find something growing down in the water, something tall—like the graceful reed I am on——” Here the dragon-fly gently fluttered his gauzy wings by way of salute and the rush bowed her head in acknowledgment.

Then he continued :

“We climb slowly up the stem until we are as high above the water as we want to be, and then—as you have seen—we come out of our case and begin our new life.”

“You are getting so beautiful!” cried the flowers; “your wings look so much larger and their lovely colours are shining in the sun; and now your body is long and bright too!”

“Will your wings be strong enough to fly with?” enquired the water-lilies anxiously.

“Oh, yes,” replied the dragon-fly, “for although

they look so thin, they are on a frame covered on each side, so you see they are really double ; whilst inside there are some little things called nerves which look like tiny tubes."

"What are those for?" enquired the flowers.

"I will try and tell you," he answered. "Directly we come up here and get out of our case these tubes fill with air—otherwise we could not fly. A white fluid also goes through them, and as this fluid and the air fill the tubes, our wings stretch out and the little frame spreads with them. That is why we belong to the 'Neuroptera' Order of insects," he added.

The flowers looked at each other ; then one of the forget-me-nots said timidly :

"We do not quite know what that word means ; please tell us."

"It is to do with those little tubes I told you about, which are really nerves," said the dragon-fly, "and means that all our family are 'nerve-winged.' Others of us who are called 'Little Ladies,' as well as our relations the 'Lace-wings' and the 'May-flies,' have the same kind of wings."

"'Lace-wings!' that is a pretty name," cried the flowers. "How could we know them if we saw them?"

"By their eyes," replied the dragon-fly, "for they have the most beautiful eyes of all."

"But you have lovely eyes too," exclaimed the rush, "and so big!"

"Perhaps you notice them more because there are so many of them," rejoined the dragon-fly.

"Many of them!" cried the flowers; "we can only see two."

"Ah, but each one is made up of hundreds and thousands of little ones, and as well as that we have three little eyes—see, they are across the front."

The forget-me-nots raised their pretty blue heads as high as possible.

"So they are!" they exclaimed in surprise. "What can you want so many eyes for?"

"That we may see all ways at the same time," he answered. "It is convenient—especially when we are hungry!" he continued with a little laugh.

"But are you just as hungry when you are grown up?" enquired the rush.

"Oh, yes, more hungry, and we kill and eat every insect that comes in our way, catching them as they fly along. Sometimes, too, we chase them and tear them to pieces—just for pleasure, you know," he added with glee.

The flowers shivered when they heard this, and there was silence for a moment. Then one of the water-lilies said:

"But what about your mask? You do not seem to have that now."

"Oh, no," he answered, "we do not need it when we come up here, we can fly so swiftly, whichever

way we like—either backwards or forwards. Oh, I am so looking forward to starting—my wings are nearly strong enough—I shall soon be off!” and he quivered his wings as if he were going to start.

“Do not go yet!” cried the flowerets; “we shall be so sorry to lose you.”

“But even when I go, I shall often come back and see you,” he answered, “for we dragon-flies love best to flit about in the sun, above the water beneath which we began our life.”

“We are glad!” came in a chorus from the flowers, “for we shall like to see your bright colours flashing in the sunlight over our pool.”

“And I suppose we shall see your cousin Lace-wing, too?” said the rush.

“You might, but it is not so likely,” replied the dragon-fly, “for my cousin does not care about the sunlight as I do, but likes the moonlight best. Neither is he fond of water.”

“But does he not grow up under the water too?” interrupted the rush.

“No,” he answered. “The mother Lace-wing puts her eggs into leaves, not in the water, and when the young ones come out they very soon spin a little silk ball in which they go to sleep for a time. They change their skins just as we do, only much more quickly, and then they come out in their lovely green suits and their great golden eyes. Now I am really off——”



“Now I am really off——”

And before the flowers had even time to say "good-bye," he had spread his new wings and risen into the air, his beautiful body gleaming in the sun, as with a whiz and a whir he disappeared across the pool.

"How beautiful he is!" sighed the forget-me-nots.

"Yes," replied the water-lilies, "beautiful—but cruel!"



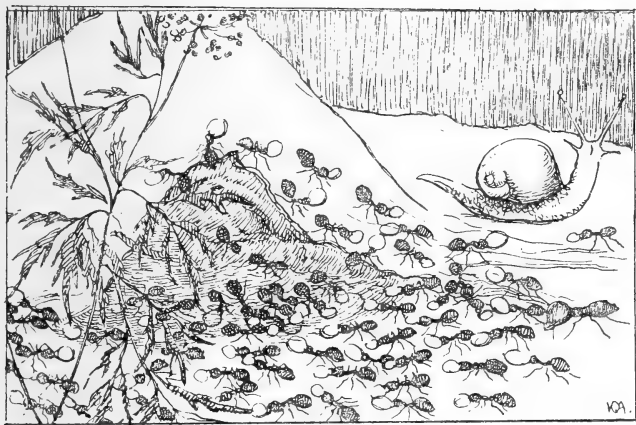
ANT HILL MOUNT

SUMMARY

A snail, crawling slowly along, passes an ant hill where a great commotion seems going on. The snail stops and enquires the cause of the bustle, and the ants tell him that their home has been broken into and that they are hastening to put everything in order again. He asks what the hurry is, and the ants explain that it is interrupting their regular work. A slug comes up whilst they are talking and agrees with the snail that he does not believe in hurrying; but both he and the snail feel rather ashamed when they learn what industrious little creatures the ants are.

ANT HILL MOUNT

“GOOD gracious!” cried the snail, who was taking a leisurely morning walk; “what can be the matter at Ant Hill Mount? I really must go and see!” and he crossed over to where a number of



“What can be the matter at Ant Hill Mount?”

tiny creatures were hurrying hither and thither in great excitement.

Each one carried a small white bundle in its jaws. The snail tried to speak to some of these, but they

paid no attention—only went hastily on. At last one passed without any bundle, so he determined to make him hear and called out :

“ Do please tell me what is the matter here? ”

“ Our house has been broken into ! ” was the hurried reply.

“ But why do you—— ” began the snail slowly.

“ I am busy now,” interrupted the ant, “ but if you wait where you are, I will come back again as soon as I can and tell you about it.” Then off he went.

The snail was quite content to stay where he was. He made it a rule never to hurry, and it seemed to him very silly that the ants were in such a bustle.

“ For,” said he to himself, “ they cannot have anything important to do, but are just making a fuss about nothing. Still, I may as well find out what all this commotion is about, as I have nothing particular to do this morning.”

So he waited patiently until he saw that the ants, who were carrying the bundles, had nearly all disappeared. A number of others were still left, and these seemed to be running in and out of the broken hill, although he could not quite make out what they were doing.

At last he espied his special friend, who cried out as he came hurrying back :

“ I am sorry I could not come sooner, Mr. Snail, but there was so much to be done.”

"What was it you were doing?" enquired the snail.

"Finding a safe place ; for, as I told you, our home was broken into and has to be mended."

"Ah!" said the snail importantly, "you should be like me and carry your house upon your back, then there would be no need for this rushing and tearing about ; but you would be able to move in a slow and dignified manner, as I do."

"Excuse me," replied the ant, with some temper, "but I must remind you that we are considered the most industrious of all insects——"

"Oh! an insect are you?" interrupted the snail.

"Yes—a proper insect too," replied the ant, "divided into three parts and with six legs ; and what is more," he added with pride, "we are members of the Hook-wing Order. Those who belong to that Order are the chief of all the insects."

"Indeed!" answered the snail indifferently ; "none of that interests me in the least. I do not even know what Order I belong to, but I am quite happy as I am."

"It is a good thing to be contented," said the ant ; "and you can be busy too and yet happy."

"Well, I should not be happy if I had to be in such a hurry," persisted the snail.

"But we are not always in a hurry like that. We were frightened and had to get the baby ants into a safe place."

"Baby ants!" repeated the snail; "but I did not see any baby ants, only grown-up ones like yourself."

"Did you not notice the little white bundles, then, that so many of them were carrying?" enquired the ant in surprise.

"Of course I saw those," he said, "but nothing that looked like baby ants. Perhaps I am getting blind, like Mr. Worm."

"Those little bundles *are* baby ants," was the reply, "only they are wrapped up in a fine net case, in which they stay until they have grown their legs and wings."

"Now that *does* interest me," responded the snail, "and I should like to hear more about it. Tell me now, why were some of the bundles large and others small?"

"Because the large ones hold queens and drones, the smaller ones workers, and the tiniest, small workers."

"And pray what are you?" enquired the snail; "a queen or a drone?"

"Neither!" said the ant in a shocked voice. "I am a big worker."

"How was I to know that?" asked the snail in an offended tone. "Instead of looking so shocked you had better say what is the difference, for I always thought myself that an ant was just an ant, and nothing more."

"Well, of course an ant *is* an ant, but some of us

are much more important than others. First there are the queens—they have wings and stings—then there are the drones—who have wings, but no stings, and then——”

“Stop, stop!” interrupted the snail. “I can understand a queen-ant, but what *is* the one you call a drone?”

“Oh, he is a big fellow,” replied the ant, “but he is lazy and does not work.”

“Ah!” laughed the snail, “he would just suit me; never in a hurry, I expect!”

The ant took no notice of this remark, but continued: “Then there are the workers.”

“And you are a worker, I suppose,” said the snail.

“Yes,” replied the ant, “but only one of them,” he added modestly. “I am really a soldier, and have to be outside on duty; that is why I am able to talk to you.”

“Dear me!” responded the snail; “you do not mean to say that there is more than one kind of worker?”

“Oh, indeed, there are several kinds!” was the reply. “There are nurses and slaves as well as soldiers; and all have their own work.”

“But what can so many of you find to do?” asked the snail in surprise.

“I will try and tell you,” said the ant. Then he added suddenly: “Please wait a moment, for I think I am wanted.” Off he ran, and the snail saw him

standing between another ant like himself—only smaller—and two little insects who were going towards the hill. These latter he apparently chased for some distance. Then he came back to the snail.

“What were you doing?” enquired the latter.

“My duty,” he replied. “Those were enemies who would have tried to get in at our gate——”

“Your gate!” exclaimed the snail. “I do not see one.”

“Oh, the door of our house is called the gate,” he explained. “It is very often left open, but we can shut it up, if we wish, with a stone. Sometimes we have more than one gate to our homes.”

“I see,” said the snail; “the enemies were going in, so you chased them away.”

“Just so,” said he. “But that is only one of our duties. The soldiers of some hills have to go and fight to get slaves. One family of the Wood-Ants does this; the ones who live over there, at the foot of Old Oak Tree,” and he waved his feelers as he spoke, in the direction of the tree.

“Ah, yes,” said the snail; “slaves—I should like to know how you get these and what they are wanted for.”

“The slaves are a smaller and weaker kind. The soldiers of one hill march to another and fight with the ants there. Then they seize the cases containing the babies and carry these back to their own hill. When the baby ants come out, they are

brought up with our own young ones, and when they are big enough they have to work for their masters."

"What kind of work?" enquired the snail.

"Oh, some have to nurse and feed the babies, and others have to build and repair the nest. A number have to wait on their owners—clean them, and even carry them if they want to travel about."

"That sounds lazy," put in the snail.

"It is that they get so used to being waited on," replied the ant, "that they really cannot do anything for themselves."

"You can call it what you like," replied the snail, "I call it nothing but laziness. Well, I have heard enough of the slaves and soldiers; now tell me about your queen."

"*Queens*, Mr. Snail, you mean," rejoined the ant politely. "We have many queens; they are the mothers, too, and lay the eggs, and sometimes they work. Quite different from Beehive Palace—there is only one queen there, and she does not work."

"I want to hear about *your* queens, not the one at Beehive Palace," replied the snail severely.

The ant—big soldier though he was—felt rather small. But just at this moment a slug came crawling past, and the snail, seeing him, forgot his anger and called out:

"Ah! here is a relation of mine who will agree with me, I know, as to what a mistake it is to hurry."

"His house is not on his back," whispered the ant ;
"has he lost it?"

"No," was the reply ; "Slug does not carry his house on his back—it is the only silly thing about him ; except for this, he is dignified and moves slowly, as I do."

By this time the slug had joined them, and the snail began telling him all about the ants and the commotion they had been in. The relatives agreed as to the folly of being in such a bustle.

At last the ant managed to get in a word, and said :

"But, Sirs, you make a mistake if you think we are always in such a hurry as you found us just now. It is not so at all ; I assure you when we move house we do it most quietly and in order, but we dislike having our regular work upset. Then, too, when we go to war we march all in line ; and some of our relations have big armies, I can tell you."

"Move house! Go to war! What is he talking about?" asked the slug in bewilderment.

"He is a soldier ant, so of course he goes to war," answered the snail in a superior way. "I dare say he will not mind telling you what his duties are."

"Not at all," was the reply. "We have, for one thing, to watch and see that no danger comes near our hill. Then, too, if any of the workers are in trouble they come to us soldiers"—he looked very important as he said this. "You saw I was needed

just now, did you not?" he enquired, turning towards the snail.

"Yes, yes," answered he, in an irritable voice; "but it is fighting we want to hear more about."

"Well, then," he replied, "I might tell you of some relations of ours called 'Army-Ants.' They do not live here, but far away over the sea. They have very large armies, and when they march they drive every creature before them; but it is only because they go in line and obey their commanders that they can do this."

"Dear me, Snail," said the slug, "this is very interesting; I am really glad I happened to come this way to-day. But did I not hear you saying something about 'queens' as I came up?"

"Yes," replied the ant; "Mr. Snail was asking about our *queen*, and I was just explaining that we had——"

"Never mind what you were explaining," interrupted the snail sharply, "but just tell us about your queens—that is if there is anything worth hearing."

The slug noticed that the ant looked rather angry and fierce at being spoken to in such a rude manner, so coming up closer, he said:

"If Soldier can spare time from his duties to talk to us a little longer we should like to hear about that, and anything else he can tell us."

The ant felt pleased at this nice speech, and the



"Then she takes off her wings——"

slug was relieved to see that he looked less fierce, as he answered politely:

"With pleasure, Mr. Slug. Perhaps you would like to know how a queen-ant begins to build the home?"

"Yes, we should like to know about that," responded the slug.

"Well, first she finds a nice place for the hill—then she takes off her wings——"

"Takes off her wings!" repeated the visitors in astonishment.

"Yes," said the ant. "You see, she does not want to fly any more, and they would be in the way while she worked."

"I can understand they would be in the

way," said the snail, "but I cannot think how she takes them off."

"Nor I," cried the slug.

"It is quite easy—she just unhooks them," was the reply.

"Ah, yes—Hook-wing!" murmured the snail. "You said a little while ago that you belonged to that Order, and I remember too when I was under the apple-tree the other morning, hearing Wasp telling that pert fellow—Robin Redbreast—all about the Hook-wing Order."

"Did you?" responded the ant. "You see, Wasp and Bee—like ourselves—are Hook-wings, and as well as this we all belong to the same family."

"Yes," said the snail, "I recollect that Wasp was telling Robin some great long name he had—now let me think—what was it?" and he looked thoughtful for a moment.

"'Hymenoptera,'" put in the ant.

"Yes, yes, that was it," he replied. "I remember now."

"Then I need not tell you about this," said the ant.

"But—but, Soldier," put in the slug, "*I* was not under the apple-tree, so did not hear about it."

"Well, as I want to tell you about our queens," replied the ant, "perhaps you could ask your friend, Robin Redbreast, about this."

"Friend indeed!" rejoined the snail; "no bird is a

friend of ours, for some of them have a cruel habit of knocking us against a stone to break our shell, and then they eat us. We should not *think* of talking to Robin Redbreast. I will tell Slug, myself, as we go home what I heard under the apple-tree, so please go on about the queens and how they build the house."

"When the queen-ant has found a nice place," said the soldier, "she digs up the earth with her front feet and throws it back with her hind ones."

"But—stop a moment!" interrupted the snail, "for that is how Wasp said *his* queen began her nest, and he told also how she made paper."

"Just so," replied the ant. "She digs in the same way as the queen-wasp, and makes paper too, but not quite such a good kind as hers."

"You can miss out about that, then," said the snail, "as I heard all about it the other morning, and if Mrs. Ant makes the same kind of nest as Mrs. Wasp, you need not tell that either. It is something *new* I want to hear," he added crossly.

"But our home is not built in at all the same way as Wasp's," replied the ant. "We have halls and rooms and nurseries, and——"

"I am getting quite confused!" exclaimed the poor slug dejectedly, "and cannot understand how the queen-ant can do that all alone."

"She does not do it alone," rejoined the soldier, "the workers help her."

"Dear, dear! But you never said you were there!" cried the snail. "You distinctly told us that the queen-ant unhooked her wings and began to build the house alone."

"Quite right," explained the ant, "I was only getting on a little too fast. The queen-ant does begin building alone, and goes on until enough work-ants are grown up to do the work instead of herself. She first makes a hall—then a room in which she puts some eggs, and out of these soon come baby ants."

"Who grow up and help the queen-mother, I suppose?" put in the slug enquiringly.

"Exactly," replied the ant.

"And what does the queen do when she has plenty of workers?" enquired the snail.

"Then she lays the eggs, and some of the workers go on building the hill and making more halls and rooms and nurseries, whilst others look after the babies—clean and feed them——"

"Surely you are talking nonsense now," said the snail, "for how can they clean and feed them inside those white bundles?"

"Ah, but that is before they spin themselves round in the little case I told you about. It is when they first come out of the egg, and are like small white worms, that they have to be washed and fed."

"But," said the slug slowly, "what I should like to know is how they get out of it."

"When they are ready to come out, the nurses help them to get free of their cases," replied the ant.

"Then I suppose they can come outside the hill whenever they want to," said the snail.

"Yes, if they are work-ants," was the reply. "Queen-ants are not allowed to go out again, and if one tries to do so, a worker picks her up and carries her back."

"How can you do with so many queens in your hill?" asked the snail. "I should have thought myself that one was quite enough."

"Oh, no, we can have several in a large nest, but if there are found to be too many young queens in one hill, their wings are unhooked and they are turned into workers."

"Well, that seems a very strange way of treating a *queen*," cried the slug and snail together.

"Strange or not," replied the ant, "we find it the best way, and it saves having a fight as they do at Beehive Palace——"

"I have told you already that I do not want to hear about Beehive Palace now," interrupted the snail; "although no doubt they know what they are about there."

"No doubt," replied the soldier a little haughtily; "but Ant Hill Mount and Beehive Palace have their own rules, you know."

The slug thought there was danger again, so, in order to turn the conversation, said quietly:

"I think I heard you say just now, Soldier, that the Wood-Ants have the slave-making habit. Is there anything else special about them, may I ask?"

"Oh, yes," was the reply; "to begin with, they build such *very* wonderful nests, with halls, galleries, store-rooms and nurseries all opening out of one another. There is as much of their nest underneath the ground as there is above, and the outside part of the hill is very high."

"Indeed!" replied the slug. "Your hill looks high, too."

"Yes," he answered, "that is why it is called Ant Hill Mount; but it is not as high as Wood-ants', though."

"To which tribe do you belong?" enquired the snail.

"To the Hill-Ants," said he.

"Oh, I see," rejoined the snail, "there are two tribes of you, then—Hill-Ants and Wood-Ants."

The soldier laughed heartily, and said:

"Two tribes indeed! Why, there are more than I know how to count even. I could not possibly tell you about them all—there are so many."

"Instead of wasting the time laughing," retorted the snail rather haughtily, "you might at any rate tell us about some of them."

"So I might," said the ant good-humouredly. "There are our relations Garden-Ants for instance;

their homes are not so high on the outside as ours, but they live more underground than we do."

"What are they like?" enquired the slug.

"Some part of that family are black," explained their relative, "and have one knob joining the front part of their body to the back—these do not sting; the others are red and have two knobs—they can sting."

"I understand about stings," interrupted the snail.

"Do you?" exclaimed the slug in surprise. "How can you know?"

"I heard Wasp explaining all that—he called them 'swords'—so you can miss it out, Soldier."

"But—but—" cried the slug, "do let him just tell me how the black ones manage without a sting."

"They have strong jaws with which they bite, and also an acid they can squirt out of their bodies into the face of their enemies," replied the ant.

"I am glad they have something, in place of a sword," said the slug.

"Garden-Ants are a little different from us in something else," continued the soldier, "they keep some of their honey-cows——"

"Honey-cows!" exclaimed the slug—and even the leisurely snail repeated in a surprised voice: "Honey-cows! What are they?"

"The little insects from which we get our honey-dew."

"Relations of yours too, I suppose," said the snail in an off-hand way.

"Oh, no, not relations," cried the ant. "They belong to an Order called 'Hemiptera.'"

"That tells us nothing," said the snail sarcastically.

"It means 'half-winged'—for they have wings of two kinds. The front pair are horny—that is, rather hard like your shell, Mr. Snail—and the back pair are gauzy-looking."

"Still, I cannot see why they are called 'honey-cows,'" rejoined the snail.

"I will try and tell you," replied the ant. "These little insects suck the juices out of plants and make honey in their bodies, like Bee, but instead of storing it up as he does, they drop the honeydew on the leaves. This we eat. The little honey-cows go on sucking and sucking until they get quite full; then we stroke them with our feelers—these, you know"—and he waved his own to show what he meant—"and the juice comes out of two tiny horns at the end of their body. We take this up, put it in our mouth and run off home."

"And what do you do with it?" enquired the listeners anxiously.

"Oh, the nurses give it to the babies, and the workers to the queens and the rest of us," was the reply.

"But what were you going to tell us about Garden-Ants and their honey-cows?" asked the snail.

"That they not only keep theirs on daisies near their nests, but hide some underground, where they feed them on the roots of plants."

"Do you keep any at Ant Hill Mount?" enquired the slug.

"No," was the reply. "Our workers are very good climbers; they can always run fast up the plants on which the honey-cows are feeding and get a supply of honeydew. Of course, if any other nest interferes with our cows we have to go and fight them, and whichever wins the battle gets the cows."

"Do you fight much, Soldier?" asked the slug.

"Not unless there is anything to fight about," he replied. "Ants make it a rule to help each other, for we are what is called 'Social insects,' that is——"

"Live in families—I know," put in the snail; "so you need not waste time explaining. Are there any other relations we ought to hear about?"

"Oh, I could tell you of numbers if I had only time—for there are the Parasol-Ants, and others who are farmers, whilst some are carpenters; but I must tell you some other day—if you would like to hear. I cannot stay now, for I see the workers are coming back with the bundles."

"So they are!" exclaimed the visitors. "What does that mean?"

That the hill is mended and ready to come back to," replied the ant; "so I must be off."

"What are you doing now?" suddenly asked the

snail, for their soldier friend was drawing his front foot through his mouth.

"I am just going to make myself clean and tidy," he replied. "I feel rather dusty after our upset this morning"; and as he spoke he stroked his body down with the comb on his front foot. "You see, I have brushes on my other feet," he continued, "for we are very particular about making ourselves clean and neat after our work, and also after eating," and he brushed and combed himself vigorously as he spoke.

"Well, I am glad if you really like to be so energetic," said the snail, "as long as you do not ask *me* to hurry, for it never agrees with me."



The Parasol-Ants.

"It is clear that it does with us, for," said :

SOLDIER ANT : We ants are busy—

SNAIL and SLUG (*together*) : As busy can be !

SOLDIER ANT : Yet we are happy—

SNAIL and SLUG (*together*) : So we see, we see !

SOLDIER ANT : Each has his own work,

SNAIL and SLUG (*together*) : Which he does with
glee !

SOLDIER ANT : The best that he can.

SNAIL (*aside to SLUG*) : (Conceited is he !)

SOLDIER ANT : Yet I tell you, friends—

SLUG (*in a whisper to SNAIL*) : (Why, that's you
and me !)

SOLDIER ANT : All should be busy—

SNAIL and SLUG (*together*) : So *you* think, we see !

SOLDIER ANT : *We* know it is true—

SNAIL and SLUG (*together*) : Well, *we* disagree !

"But they are wanting me," cried the ant, "I must
go at once !"

And then—like the well-trained little soldier he
was—he saluted his visitors politely and ran off in
haste to Ant Hill Mount.

The snail and slug went leisurely on their home-
ward way, and as they crept along talking of all
they had heard, they admitted to each other that,
although they did not want to hurry themselves,
they admired the ants for their industry and wisdom.

GRASSHOPPER LANE

SUMMARY

A field-mouse talks with a grasshopper and enquires how he makes his chirping noise. She also asks if he is any connection of the field crickets. He tells her of his relationship to the latter and also to a locust, explaining that he is, in fact, a small locust himself.

GRASSHOPPER LANE

“**D**EAR me, how you made me jump!”
“I usually do make people jump,” laughed the grasshopper.

“Well, I am not ‘people,’ I am Mrs. Mouse—Mrs. Field-Mouse—and I just came out for a little air and a look round—and—and—dear, dear, you quite bewilder me,” she continued, for the grasshopper had jumped over her head whilst she was talking.

“I am so sorry,” he said, “but you must really forgive me, for I get the fidgets if I try to stand still.”

“Fidgets indeed! I would soon teach you to stand still if you belonged to me,” said Mrs. Mouse severely, for she felt very much upset.

“Perhaps if I had been trained to stand still when I was younger, it might have made a difference,” said the little grasshopper meekly. Then he added as politely as he could: “Do you live in this lane, Ma’am?”

“No,” replied the mouse, who began to feel less angry when the grasshopper spoke so nicely, “I live in the field on the other side of the hedge.”

"Ah, I expect, then, that is the reason why we have never met before," he answered. "To tell you the truth," he continued, "you rather startled me too—you came from under the hedge so quietly."

"Did I?" said the mouse: "well, I am sorry. I tell you what I will do next time; I will give a little squeak—so," and she made a tiny sound that could scarcely be heard.

"A capital idea!" exclaimed the grasshopper. "And when I am coming, I will do so—" and he gave a loud chirp right into Mrs. Mouse's ear.

She was so startled that she nearly exclaimed again, but stopped herself just in time, and said instead:

"Why, you are a kind of cricket after all, I do believe."

"Oh, no," said the grasshopper, "I am not a cricket, although I am closely related to them."

"Then what are you?" asked the mouse.

"I am a grasshopper," he replied.

"But you make a chirping noise exactly like my friend Field-Cricket," persisted the mouse.

"Please excuse my contradicting you, Ma'am," said the grasshopper, for he felt rather afraid of rousing the mouse's temper again, "but it is not exactly the same, for I make my chirp with my hind leg——"

"Now, my dear boy," interrupted the mouse, "I am a good deal older than you are, so you can

hardly expect me to believe that you chirp with your hind leg—it is simply ridiculous.”

“But indeed, Ma’am,” stammered out the grasshopper, “it is true. If you would not mind stepping into that patch of moonlight in the middle of the lane I will show you how I do it.”

Rather unwillingly Mrs. Mouse ran silently along the lane, keeping close to the hedge, until she reached the spot where the moonlight fell. The grasshopper, glad of the excuse, had time to take several good jumps backwards and forwards, and yet arrive upon the patch of moonlight as soon as the mouse.

“Now, Ma’am,” he said respectfully, “if you will kindly look at my hind leg——”

“Which one?” enquired the mouse.

“Either,” was the reply. “Look on the inside of the one nearest you.”

“Well, I am looking,” said the mouse.

“You will see a kind of little rough edge with teeth,” explained the grasshopper.

“Yes, I see,” she answered.

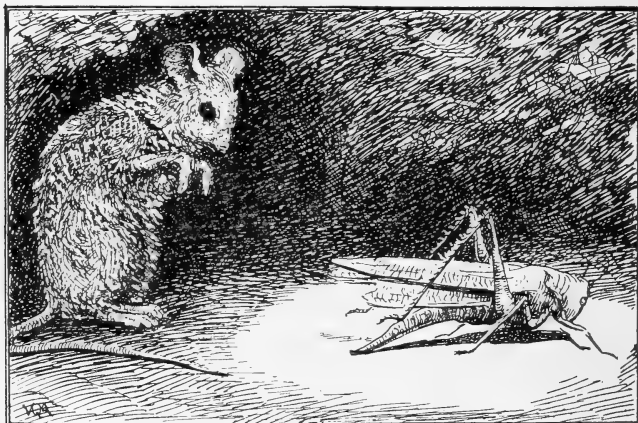
“Now I am going to rub that rough edge which is on my hind leg—you do see it *is* my hind leg, do you not, Ma’am?”

“Of course I see it is your hind leg,” said the mouse impatiently; “do go on, please—you are going to rub that rough edge against—what?”

“Against my wing, in which I have a little drum,”

said the grasshopper, "and every time I move my wing it strikes my drum. Now listen!"

The mouse drew back a little, remembering her late experience, and just as she did so, the grasshopper made a loud chirp, but to her astonishment he did not jump, but stood quite still, fixing himself firmly by his front feet and pressing his body downwards.



"Now listen!" said the grasshopper.

"You do see that I was telling you the truth, do you not?" asked the grasshopper anxiously.

"Yes, yes," said Mrs. Mouse, rather reluctantly. "I see it is true. I suppose that is really how Field-Cricket makes his chirp too," she added, in an off-hand way.

"I think he makes it by rubbing his wings to-

gether," said the grasshopper, "but I am not quite sure."

"Well, I must say that seems more sensible than chirping with your hind leg," said the mouse.

"I have a cousin, a great big fellow, ever so much bigger than I am," continued the grasshopper, taking no notice of the mouse's last remark; "he has a rough edge just under his left front wing, and this he rubs against the edge of the other wing, to make *his* chirp. But you will never guess where his ear is!"

"On his head, I suppose; the only proper place for ears," replied the mouse tartly.

"No, no—quite wrong. Guess again, Ma'am."

The mouse did not want to guess, because she could not think of any other place, so she said :

"Ssh! ssh! I thought I heard a sound! Do you know I think we are very foolish to stay in the moonlight." Then she added in a whisper :

"I am dreadfully afraid that Mr. White Owl might catch sight of me; you know he only lives just across our field in 'Old Church Tower.'"

"Then we had better get quickly under the hedge," said the grasshopper, and he began to leap off.

Mrs. Mouse followed more slowly and cautiously, peeping round everywhere with her bright eyes as she ran along. She hoped that the grasshopper would have forgotten about the guessing, but not a bit of it, for as soon as they had got safely under the hedge, he said :

"Now guess where my cousin's ear is."

"I can't," said the mouse. "I must give it up."

"You do give up easily," said the grasshopper. "Well, I suppose I must tell you. It is—you never could have guessed—on his front leg under his knee! There!" he exclaimed triumphantly, "what do you think of that?"

"I think that you are very funnily made animals——"

"Insects, please, Ma'am, insects!" cried the grasshopper.

"Insects!" repeated the mouse, "you are surely mistaken. You will be telling me next that Field-Cricket is an insect."

"So he is!" exclaimed the grasshopper, "and so is House-Cricket and my great big Cousin Grasshopper and Earwig and Cockroach, and what's more, *we* have got a family name just as much as 'Orange-tip.' I was hiding in the grass and heard her telling the flowers her family name."

He had got so excited by this time that he had to stop and take breath, and Mrs. Mouse was able to get in a word.

"And what is this family name that you are so proud of?" she asked.

"ORTHOPTERA, Ma'am, ORTHOPTERA!" he replied.

"Dear me, your name seems as long as your legs," said the mouse.

"We don't use it every day—only just for best; but we are obliged to have it because it shows that we are 'straight-winged' insects. There are six families of us."

At this moment a shrill chirp was heard, and the mouse exclaimed :

"Ah, there is my friend Field-Cricket—let us call him to come and talk with us."

So the grasshopper gave several chirps to show the cricket where they were, and a moment later he hopped up to them.

"Good evening," he said cheerily. "What are you two doing here?"

"Having a chat," said Mrs. Mouse. "I have been hearing that you are related to Grasshopper; I had no idea that you were."

"Oh, yes," he replied, "we are relatives, and we are something alike in our jumping and chirping, are we not?"

"But I am not such a timid fellow as you are, only coming out at night," put in the grasshopper.

"No, there's certainly nothing timid about *you*," said the mouse; "but when I come to think of it, we never do see Cricket, except at night. How is that?" she asked, turning to him.

"Well, I do not really care for being out much in the day," he said, "and night is my busiest time; I come up then to get my food."

"But what do you do all day?" asked the mouse.

"I often hear you singing, although I cannot see you."

"I am always in the ground," he replied, "for that is where my young ones stay all through the winter, until they get their wings."

"Then I suppose you are singing to them," said the mouse.

"Yes," answered the cricket; "and I sing too because I am so happy."

"What do you sing about, old fellow?" asked the grasshopper.

"Oh, about lots of things," said the cricket; "about being contented, for one thing."

"Do chirp us a little song," begged the mouse and grasshopper together.

At first the cricket said he really could not, he felt so shy. But at last, when they promised not to look at him, he chirped a sweet little song, which he said was called

CONTENTMENT

"Chirp! Chirp! Chirp! That is my lay,
For I am happy as the day:
Not a single care have I—
Pray, would you learn the reason why?
It is because I sing away,
Chirp! Chirp! Chirp! the livelong day.

"Chirp! Chirp! Chirp! That is my song:
If things go right or things go wrong
Just as blithe and gay am I—
Can you not guess the reason why?
It is that I'm content, you know,
Chirp! Chirp! Chirping, as I go."

"Thank you," said the mouse, when he had finished, "that is really very nice. Does Mrs. Cricket sing the same songs as you?"

"Oh, no," he replied, "she never sings; you see, she is so busy."

"Yes, yes," answered the mouse, "of course she is, especially when the young crickets come out of the eggs. By the by, what are your little ones like?"

"They look very much like us grown-up ones," he answered, "except that they have no wings at first."

The grasshopper, who had been very good and quiet up till now, began to feel that it was his turn to talk, so he hopped a little nearer to the mouse, saying as he did so:

"Perhaps, Ma'am, you would like to hear how we grasshoppers look when we are little. Shall I tell you from the beginning?"

"Please do," said the mouse, "but you need not sit so close, it—it makes me so hot."

She really thought he might forget and jump over her head again.

"Well," he began, "our mothers put their eggs in a hole in the ground, then she covers them up nicely."

"What does she do that for?" enquired the mouse.

"To keep them safe," answered the grasshopper. "You see, they are going to stay there all the winter."

"Are they really?" exclaimed the mouse in sur-

prise. "Then when do the little ones come out of the egg?"

"Not until the spring," replied the grasshopper.

"And have they got wings?" enquired the mouse.

"No," answered the grasshopper. "We do not have wings at first; we have to grow them."

"Well, it is no use just saying that you 'grow them,'" interrupted the mouse sharply. "I want to know *how* you do it."

"We change our skins several times," explained the grasshopper.

"Change your skins!" cried the mouse. "I never heard of such a thing. Is it difficult?"

"Oh, no; the old skin slips off and there is another underneath; and when the last skin slips off we have our grown-up coats on and wings."

"And our chirps!" put in Field-Cricket with a laugh.

"Ah, yes, your chirps!" repeated the mouse. "By the by," she continued, turning to the field-cricket, "I meant to ask if you make your chirping in the same manner as the grasshopper does."

"Something in the same way, but not quite," he answered. "We have a rough edge underneath our left wing-cover, and this edge we draw across our right wing-cover, which is where our little drum is; that is how we make *our* music."

"Now shall I go on telling you some more?" asked the grasshopper anxiously.

"Yes, please," said the mouse. "I should like to know what you eat."

"Well, we like vegetable food best," said the grasshopper; "and we have some little teeth down inside our body for chewing up the leaves and things we eat."

"We like the same kind of food too," joined in the cricket, "and we eat little insects as well; we sit at the doors of our houses to catch these."

"I am afraid you are both very greedy," said the mouse.

"Nothing like our relation the locust," cried out the grasshopper.

"No indeed; he is a regular thief."

"A thief!" exclaimed Mrs. Mouse. "We shall have to be careful. Is—is he likely to come this way to-night?" she asked, looking nervously round.

"Oh, no," said the grasshopper. "Luckily he does not live here."

Mrs. Mouse gave a sigh of relief. "What does he steal?" she asked.

"Every green thing that comes in his way," was the reply, "and even the bark off the trees. Numbers and numbers of them fly together, until sometimes they almost hide the sun."

"Dear me, dear me!" exclaimed the mouse, "how terrible."

"If a lot of my locust cousins were to come here to-night," continued the grasshopper, "and were to



"If a lot of my locust cousins were to come here to-night . . . they would eat and eat until not a blade of grass was left."

see our nice green field on the other side of the hedge, they would stop and eat and eat until there was not a blade of grass left."

"Eat up our field!" cried the mouse. "Disgraceful! No wonder you call him a thief. I am glad he does not live here. What does he look like?"

"Something like me," said the grasshopper; "in fact he is a very near relation of mine, only he is larger and wears a light brown coat, with a little touch of green on his wings; but his legs are much bigger and stronger than mine."

"Tell Mrs. Mouse about his chirp," said the cricket.

"When he is going to chirp, he stands quite still on his front legs—

he has two pairs, you know," explained the grasshopper; "then, if he wants to sing loudly, he lifts up both his hind legs and draws them over his wings, but if he wants to sing very softly, he only draws up one of his hind legs over a wing."

"That's all very wonderful, but I do not like him," said the mouse firmly; "it makes me shiver to think he could eat up our field. I do hope that is your only relation who is a thief?"

"Yes, the only one," cried the grasshopper and cricket together. "Earwig is all right; she is a very good mother and looks after her little ones until they are quite grown up."

"I had no idea that she was a relation," said the mouse.

"She is 'straight-winged' too; that is why we are connected, and so also is Cockroach."

"I do not know much about Cockroach," said the mouse.

"No," replied the cricket, "I do not expect you do. My cousin, House-Cricket, knows that part of the family best, because he chiefly lives indoors."

"Ah, but I have met your cousin, House-Cricket," said the mouse; "I think he comes and lives out of doors sometimes."

"Yes, yes!" exclaimed the cricket, "you are quite right, he does; when it is very hot weather he camps out in the garden for a change."



"My coat being the colour of grass,
enemies cannot see me."

"Of course I know you and Mole-Cricket best," said the mouse. "He lives just across the field in the wood."

"He is a funny little fellow," said the grasshopper, "he has such queer front feet, they are like small hands."

"What are they for?" enquired the mouse.

"To dig with," replied the cricket. "He digs as he goes along under the ground, and he eats the roots of vegetables and flowers—he is a mischievous little fellow."

At this moment there was a "Hoot-hoot," followed by a screeching sound, which made Mrs. Mouse scamper under the hedge.

"That's White Owl!" she said in a whisper. "Whatever you do, don't chirp. I must hide here until he has passed, and then hurry home."

The grasshopper and cricket followed her into her hiding-place, and they talked together in whispers.

"That is the benefit of my coat being the colour of grass," said the grasshopper; "enemies cannot see me, and my great big cousin, who lives so much up in the trees, has a coat the colour of the leaves."

"Yes, yes," murmured the mouse. She was not really attending to what the grasshopper was saying, as she felt too nervous, for White Owl was still wheeling about. At last he passed on. Then she said:

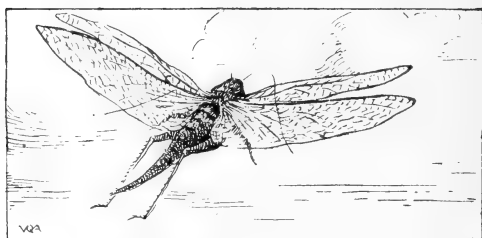
"I think I will run home now."

"We will take you, Ma'am, if you will allow us," said the grasshopper politely.

"No, no, please not," said the mouse; "I can scamper home very fast." And then with a twinkle in her little bright eyes, she added: "You, Cricket, might forget and give a loud chirp, and you, Sir," she said, turning to the grasshopper, "might also forget and jump over my head—so I prefer to go alone."

Off she scampered, and when they saw that she was safely through the hedge and half-way across the field, the cricket started too, chirping happily as he

went, whilst the grasshopper spread a pair of handsome wide wings, with brown and yellow stripes, and flew away home.



The grasshopper . . . flew away home.

BEEHIVE PALACE



SUMMARY

The honeysuckle and clover talk together, wondering what the bee can want with the honey he collects from their flowers. A bee, who overhears them whispering, enquires what they are talking about, so they tell him, and then he explains what he needs the honey for and how it is used. He also tells them about his home and his Queen.

BEEHIVE PALACE

THEY were all awake and happy—the birds, bees, and flowers—for who could be anything but happy on such a lovely sunny morning? The birds were piping their sweetest songs—the humming and droning of the bees was heard over garden and field; even the wind came gently blowing across the downs with a message from the sea to the flowers, which were giving out their loveliest scents in return for the sunshine.

“I do feel glad to be alive this lovely morning,” said the white clover.

“So do I,” replied her friend the honeysuckle.

“There is only one thing I wish for,” continued the clover.

“And what is that?” enquired her friend.

“That I grew as high up as you do, for then I could look over the hedge and see when the bees were coming and—— Oh, I could see lots of things!”

“Never mind, little friend,” said the honeysuckle kindly, “you can see the sun from where you live just as well as I can at the top of this hedge—so what

does anything else matter? and as for the bees—you can *hear* them coming!”

“That is true,” answered the clover. “I love to hear the bees, for they always sing at their work—such a lovely song too.”

“Such a lovely song,” repeated the honeysuckle dreamily, “it is like a lullaby; but we flowers understand what it is all about.”

“Yes, we know,” replied the clover. “There is one thing, though, that I never can make out, and that is what the bees want with all the honey they gather from the flowers.”

“I do not quite know either,” said the honeysuckle.

“Perhaps they want it to eat,” said the clover. “I must say I should like to know.”

At this moment a bee came over the hedge, and after wishing them good-morning, he said:

“Pray what were you two talking about so earnestly?”

“We were talking about you,” said the honeysuckle.

“Dear, dear!” laughed the bee. “I hope you were saying something nice, for you know I like sweet things.”

“We were saying that we loved to hear you singing at your work,” explained the honeysuckle.

“Well, that was nice,” said the bee. “Buzz——a!” he added—which in his language meant “Hurrah!” “And was that all?”

There was a moment's silence. Then the white clover peeped up shyly and said :

"I was wondering what you could need with all the honey you take."

"Ah," said the bee, "I believe there are those who think we only want it to eat ourselves."

The clover hung her head, and in order to hide her confusion, the honeysuckle said quickly :

"But surely you do want it to eat?"

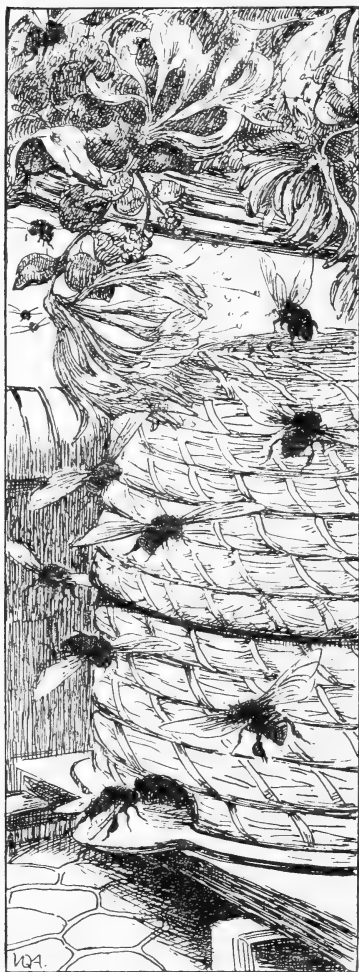
"Yes," replied the bee, "of course we feed ourselves when we are out at work, and sometimes give to friends whom we meet on the way, but we really gather the honey to take home, and we store even more than we need ourselves."

"Where is your home?" enquired the clover, who had now recovered her composure.

"I live at Beehive Palace—just close here," was the reply. "Our home is an old-fashioned one, made of straw ; we like it better than the new kind made of wood, for it is much prettier, and nice and warm into the bargain. I expect you can see our house from your hedge," he added, turning to the honeysuckle as he spoke, "for it has a shed over it, and some members of your family lean over and give our house shade, as well as refreshment."

"Oh, yes, we often nod to each other," said the honeysuckle. "I had no idea, though, that Beehive Palace was underneath there."

"But," said the clover, "if you have got what you



"Our home is an old-fashioned one."

want over your own porch, why do you have to come to this field?"

"Because, dear little Miss Clover, we never mix the pollen."

"Pollen!" they cried, "pollen, what is that? We thought you came for honey!"

"I come for both," said the bee good-temperedly. "The pollen is the sticky dust which covers my velvet coat when I creep into your flowers for the honey. This dust I brush off, make into a little lump, and pack into my baskets."

"I do not see any baskets," said the honeysuckle, looking all around.

"Ah, I carry my tools with me,"

laughed the bee. "Just notice my hind legs"—he turned them towards the honeysuckle as he spoke—"there is a basket and brush made of hairs on each one. When I want to get the pollen off, I brush with one leg, so"—he suited the action to the word—"and in goes the dust into the basket on the other leg."

"Yes, Clover," said the honeysuckle, "he really has baskets and brushes on his hind legs."

"But," asked the clover thoughtfully, "what did you mean about never mixing the pollen?"

"I will try and tell you," he replied. "As we fly about we carry the pollen from one flower to another, and in this way help to make more flowers grow and fruit-trees bear more fruit. But if we carried the pollen, say from a violet to a primrose, it would be of no use in helping either to grow. So we only visit one kind of flower on the same journey. This morning I am on a Clover Journey."

"Oh, I am glad!" cried the clover, and as she spoke the bee flew down with a Buzz—zum! and whispered in her ear:

"Hast thou a drop of honey sweet
In thy cup—to spare for me?
And I, in return, a lullaby
Will hum and croon to thee.
For if we take we must surely give—
'Tis the fairest way, you see."

"The clover cried : ' Pray take thy fill
From my honey-cup, dear bee,
And then I'd love to hear thee croon
A lullaby to me :
But not in return for what you take,
For we *give* our honey—free ! "



"Hast thou a drop of honey sweet
In thy cup—to spare for me ?"

And whilst the golden-brown bee took his fill, a great humble-bee came flying along. He was very big and handsome, with a black and yellow striped coat. His wings were broad and shone brightly in the sunshine, and he hummed to himself as he came towards the hedge.

"Who may you be visiting on *this* journey ?" asked the honeysuckle with a little chuckle.

"The sweet honey-pot that lives on this hedge,"

replied the humble-bee with a buzz of amusement. "But how come you to know the rules as to our journeys?" he asked in surprise.

"Ha! ha!" laughed the honeysuckle, "the white clover and I know all about it, for we have had a visitor from Beehive Palace."

"Indeed," said the humble-bee. "Oh, I see him, talking to Miss Clover."

"Do you live at Beehive Palace, too?" asked the clover.

"Oh, no," said the humble-bee, "I live in the earth—I am not a Hive-bee."

"Clover, dear!" cried the honeysuckle in excitement, "here is an 'Earth-bee' come to see me!"

"An 'Earth-bee,'" repeated the clover in surprise. "What is that?"

At the same moment their visitor from Beehive Palace looked up and exclaimed:

"Oh, it is you. Good-morning!"

"They know each other," whispered the honeysuckle to the clover.

"Yes, we know each other," laughed the humble-bee. "We both belong to the Hymenoptera family, you see——"

"And also to the Hook-wing Order—the chief of all the insects," put in the golden-brown bee with pride.

The two listeners looked quite puzzled.

Then the honeysuckle said hesitatingly:

"It is rather—confusing to have so many—titles——"

"Not to us, Miss Honeysuckle, not to us," replied the humble-bee. "Indeed, we have other names as well, to show to which particular branch we belong. I am a humble-bee, but you can call me 'Bumble,' if you like, and my little relative there——"

"Oh, just call me 'Bee,'" said their first friend.

"Thank you," replied the clover, "that will be easier. I was really beginning to feel quite nervous, thinking we might have to call you by those big names."

The bees cried, "Buzz—z—z—zum!" for they were amused to think that the flowers found their names difficult.

Then the honeysuckle turned to the humble-bee and said:

"Bee was just telling us about the pollen and his baskets and brushes, but," she added, "we should so much like to know what he wants the pollen for."

"It is the bee-bread on which we feed the young ones," was the reply.

"And the honey—what about that?" enquired the clover.

"Some of it is for food, and the rest to fill the honeycombs with. We store up more than we need, you know, so as to have plenty for the winter, for we supply others as well as ourselves."

"Other insects, do you mean?" asked the flowers.

"No, no," replied the bee; "I mean those whose gardens we live in, and who gave us Beehive Palace for our home."

"I see," said the honeysuckle. "And does the honey you take go into your baskets too?"

"Not a bit of it," replied the bee. "We suck that in, and it goes down our throat into a little bag we have in our body."

"But if you eat it, how can it be for food?" persisted the clover.

"We fly back home when we have a load," explained the bee. "As we pass in some of the other workers take the bee-bread out of our baskets, and we go and pour the honey out of our throat into the cells——"

"Unless you want to make wax," called out the humble-bee, who had wandered a little further down the hedge.

"Make wax!" exclaimed the honeysuckle and the clover together. "How is that done?"

"Well, instead of pouring out the honey when we get home," said the bee, "we go to the top of Beehive Palace and hang upside down by our front legs. Others hook themselves on to our back legs by their front ones, until there is a long chain of us. We all stay quite still for a long time, until the honey turns into beeswax and goes into eight little pockets under our body."

"And who eats that?" enquired the flowers.

"No one *eats* it," laughed the bee gaily. "As soon as one of us finds that the wax is ready, we unfasten ourselves from the chain, pick the wax out of the pockets with our strong jaws, mix it up into a paste, fix it on to the top of the house, and fly off to get another load of honey."

"But what about the wax which you have fixed to the top of the house?" asked the clover anxiously.

"Ah, that is the business of other workers," he replied, "for we each have our own duties at Beehive Palace."

"Well, and what are the duties of the wax-workers?" enquired the honeysuckle.

"When there is enough to work with, they go and fetch some of the wax and spread a thick sheet of it, and upon this they build little cells all fitting close to one another."

"And what are the cells for?" asked the clover with interest.

"Some are used for honey," said the bee, "in others the nurses put bee-bread for the babies. Then there are the cells in which the queen-bee puts the eggs. Some of these are for great lazy bees called 'drones,' smaller ones are for workers—like myself—and there are always five or six big cells for baby queens, who have the best food given to them."

"They have nurses and queens, Clover dear!" exclaimed the honeysuckle in excited tones.

"A queen," corrected the bee.

"But you said just now five or six queens," cried the honey flowers in puzzled tones.

"No, I did not. I said five or six *cells* for queen-bees. The grubs are shut up tight in the cells, and after a time those shut up in the big cells—who are going to turn into queens—begin to sing. When the real queen-bee hears this song, she gets very, very angry, and runs fast to the cells to try and kill the new baby queens, but the workers stand in front and will not let her do so."

"Then what does the queen-bee do?" asked the flowers breathlessly.

"She says, 'I will not stay here any more!' and off she flies out of the hive in a rage. Some of the old bees go with her and they make a new home."

"Then you have no queen," said the clover in a disappointed voice.

"You wait and hear," said the bee. "When the old queen has gone, the other bees keep looking at the cells in which the young queens are shut up, until at last one day out comes one. She has a very fine velvet dress with gold, which the bees brush and smooth; they feed her with honey and take great care of her. But just as she has got nice and strong, out comes another queen!"

"Oh dear! what happens then?" enquired the honeysuckle.

"They—I am sorry to have to say it," said the bee reluctantly, "they fight."

"Fight! What a dreadful thing!" exclaimed the flowers.

"Yes, fight until the strongest one kills the other. Then the conqueror rushes off to the other queen cells, tears off the wax lids, and stings the baby queens to death. After that she is Queen of the Hive."

"That sounds very cruel," said the flowers.

"It cannot be helped, for only one queen can reign at a time," explained the bee.

"It is like a fairy tale," said the clover. "Are you quite sure it is all true, Bee?"

"Quite sure," he replied.

"Then what does the queen do?—does she work?" asked the flowers.

"Oh, no," replied their visitor. "Our queen never works; we do not allow her to. We wait upon her, and she has only to lay the eggs in the wax cells which the work bees have made ready."

"Then I suppose she just goes out and enjoys herself?" said the clover.

"No; we only let her out once," was the reply, "for a fly in the sun and air—that is soon after she is made queen. She has such small wings that she cannot fly far."

"Poor thing!" said the flowers regretfully.

"Yes," said the bee; "I am sorry for her too that

she has always to stay at home instead of roaming over the hillside and clover fields or in a most lovely garden to which I go."

"Do you mean the one with terraces?" called out Bumble, who had just flown back nearer to the others.

"Yes," was the answer. "It is the loveliest garden in this village—and there are some pretty ones here too—it is just made for us bees."

"Indeed it is," answered Bumble. "Talk about fairyland; *there* is a fairy garden for you if you like. The flowers have whispered it to me that the fairies sometimes dance there in the moonlight, and then the flowers join hands and dance too, but that is when the world is all asleep."

"Oh, do *please* tell us more about it," cried the flowers.

"It has narrow, grassy paths," said the bee, "like green velvet—you can see them from the terraces—and the flowers stand close together on each side of the paths. There are Madame Rose and her sisters—the Miss Sweet-peas—such a tall family they are, as high as this hedge, and they wear the loveliest dresses—their scent too—it makes me buzz when I think of it. Then there are the Mr. Larkspurs—the Mallow family in their bright crimson coats—the Canterbury Bells in purple, white, and pink—the Carnations in such rich dresses; whilst over the arches climb not only crimson roses but Clematis—with

great purple eyes watching us as we fly about—and the little apple-trees too, covered with such lovely rosy-faced apples——Buz—z—z—zum! I cannot tell you half that there is in that garden.”

“It must be lovely,” said the honeysuckle. “I sometimes wonder,” she continued pensively, “why some of us have such pretty dresses, and others such a delicious scent.”

“Do you not know,” said the bee, “that you have both your colours and your sweet scents to show the insects where to find you?”

“Oh, is that it?” cried the clover in delight. “It is just as if we said ‘Honey kept here’ when we want to tempt you to pay us a visit, then?”

“That is it,” replied the bees, and they both hummed softly:

“Hast thou a drop of honey sweet
In thy cup—to spare for me?”

Whereupon each flower waved her head and whispered:

“Oh, prithee come and take thy fill
From my honey-cup, dear Bee!”

And the bees were not long in availing themselves of this permission. Then when they had taken their fill the clover said:

“Tell me, Bee, as you live in such a grand palace, with wax cells and a queen, are you not very superior to an earth-bee?”

“Not a bit of it,” he replied. “They make wax

cells and get honey and bee-bread for their babies—but the great difference between us is that they do not store honey for the winter as we do. Bumble,” he called out, “Miss Clover wants to know who you are and where you live.”

“We are Wild-bees and live in the earth,” said Bumble. “Our homes are rough and small—not grand like Beehive Palace”—he gave a little laugh and looked at Bee as he said this—“but we all live very happily together and share the work. Sometimes there are two or three hundred of us in one home, but sometimes only quite a few.”

“And who builds your house?” asked the flowers.



“If she finds a nest left by a small bird, she uses that,” said Bumble.

"The mother of the family does that. She goes to sleep all the winter, then when she wakes up she looks for a nice place for a home. If she finds a nest left by a small bird, she uses that instead of building a new house."

"And if she does not find an empty bird's nest, where does she build then?" asked the clover.

"Oh, in the fields," said Bumble, "or else among stones covered with moss. She makes a moss roof, lines this with wax to keep out the rain, and builds a long tunnel underground to the nest."

"But what does she want a tunnel for?" said the flowers.

"Ah!" laughed Bumble, "that is to keep her nest safe so that no one may find it. When she has built the home she collects food and puts it in the cells, then she lays the eggs, and in time these turn into grubs and then into Humble-bees, who grow up and help her in the work."

"And do you make honey?" asked the flowers.

"Yes," said Bumble, "but not such a good kind as they do at Beehive Palace; it is good enough, however, for our enemies to come and steal."

"Your enemies!" exclaimed the clover in surprise. "Who are they?"

"Mrs. Field-Mouse is one," said the humble-bee, "and Mr. Mole is another. They come and eat our combs, and sometimes kill us. You have trouble with the Mouse family, too, do you not, Bee?" he asked.

"Yes," was the reply. "But they are not the only ones who cannot make honey, yet want to steal it. The Hornets, Wasps, Ants, and Moths are all just as bad, and often try to pass our barrier, but we always have a sentinel on guard outside, and if an enemy comes along he gives the warning, and other sentinels come and help him to defend our stores."

"How do your sentinels get rid of the enemies?" asked the flowers.

"They first try to drive them away, but if they will not go, they draw their swords—their stings, you know—and kill them. When dead wasps are to be seen lying outside Beehive Palace, you may always be sure they were enemies and——"

"Robbers!" put in Bumble, and he gave such a loud buzz that the honeysuckle feared he must be very angry, so she turned quickly to her first friend and said :

"Bumble told us just now that he was a Wild-bee ; I am wondering if you are a Tame one."

The bees buzzed so much with laughter that Miss Honeysuckle felt quite uncomfortable, and asked timidly :

"Have I said anything funny ?"

"Oh—very—very funny !" buzzed the bees.

The honeysuckle drew herself up and said with dignity :

"I have always heard that it was thought exceedingly rude to laugh if anyone makes a mistake."

"So it is, Miss Honeysuckle, so it is, and we beg your pardon for being so rude," cried the bees; "but it really was too funny!"

"Well," said the clover, "I do not see that there was anything so very funny in what Honeysuckle said, for I suppose there are only two kinds of bees, and if Bumble is a Wild one, it is not so surprising that she should think you were a Tame one."

The bees began to buzz again, but stopped themselves just in time, and Bumble said:

"He is a Honey or Hive-bee. But it is quite a mistake to think, Miss Honeysuckle, that we are the only two kinds; if we had but time we could tell you of a number of others, could we not, Bee?"

"Yes indeed," he replied. "Shall we tell you about a few of them?"

"Please do!" cried the flowers.

"Well," he began, "there are the Solitary-bees—there are ever so many kinds of them—little black insects who do not look much as if they were related to us. They burrow in the ground and live all by themselves—not like us; we are Social-bees and prefer company. Now let me see, what other relations shall I tell you about?"

"The Mason-bee," suggested Bumble. "Let me tell about her. She lives in a hole in the ground and makes a cell of mud."

"That does not sound very nice," said the flowers.

"Ah! but she makes it ever so pretty," was the answer. "She lines it with bits of green leaves or with rose leaves. Then she puts in some food and an egg. The Leaf-cutter bee, too, is very clever. Bee, whilst I take a sip of honey you might tell them how she gets leaves for her nest."

"She holds on to a leaf," explained Bee, "and turns round and round, biting as she goes."

"But what can she do with such a large piece of leaf?" enquired the flowers in astonishment.

"That is the clever part," was the reply. "When she has nearly bitten off the leaf, she spreads out her wings all ready to fly—this is to balance herself. Then she gives the last bite and flies off with the leaf between her jaws and feet. She packs this into her hole and goes off for another one."

"That *is* clever," cried the flowers excitedly. "Tell us more!"

"I am afraid I cannot stay," said Bee, "for I have been talking here a long time as it is, and I am really due at Beehive Palace with my first load."

"I too have work to do at home," said Bumble, "and must also be off. If we were not so busy, there is lots more we could tell you about our family and relations."

"Lots!" repeated the bee; "but as it is I must be going, for the rules are very strict at Beehive Palace and we are expected to keep them."

"Well, the best of friends must part," said the

honeysuckle, "and of course we must not keep you from your duties."

"But," put in the clover, "do not forget—either of you—that we have

"Always a drop of honey sweet
In our cups—to offer thee,
And nought we ask for in return,
For we *give* our honey—free!"

"BUZZ——ZA!" hummed the bees—and they flew away!



MOTH LAND

SUMMARY

The evening primrose tells Humming-bird Moth that she had always thought he was a butterfly until her friend, the heartsease, told her that she had learnt from Orange-tip that he was not. She begged him to tell her about himself, and added that she understood he had some relations called "Silkworms" about whom she and the other flowers were anxious to hear.

MOTH LAND

“YOU promised us, Prim dear, to ask him,” said the heartsease, “and we are so anxious to hear what he has to say—are we not, friends?” she asked, turning to the other flowers.

“Yes, yes!” they cried.

“But,” replied the evening primrose, “you said yourself that I did not wake up until after Humming-bird Moth had passed this way, so how can I ask him?”

“Well,” replied her friend, “do try and be awake next time he comes, for it is only fair that you should find out what we want to know, when you think of all we have told you about Orange-tip and her play-mates.”

“Yes indeed, it was lovely,” she replied; “I did like hearing about it and of how Humming-bird Moth and his relations all belong to the same family as Orange-tip, and have that long name—now what was it, Pansy? I have forgotten it again.”

“I know,” said the heartsease proudly—“it is ‘Lepidoptera’ and means ‘scale-winged.’”

“That was it,” answered the evening primrose.

"They told us too," continued the heartsease, "that they were all caterpillars and chrysalises before they were butterflies."

"And I think we heard that Humming-bird Moth and his family are caterpillars and chrysalises too, before they grow up," put in the mignonette shyly.

"Quite right, Miss Mignonette," answered the geranium, "although I had forgotten it myself until you mentioned it. But that reminds me—did not Orange-tip, or one of them, say something about Humming-bird Moth's caterpillars and the garden?"

"Yes, Mr. Geranium," chimed in the sweet-pea, "she said——" And then she paused a moment. "I do not like to seem unkind, but I *think* she said that they did more harm in the garden than their caterpillars."

"Ah!" rejoined the geranium, "perhaps Miss Prim will find out about that for us from Humming-bird Moth."

"Indeed I will," was the reply, "the very first time that I can persuade him to wait a moment; but you know it is difficult to get him to stop, for he sucks the honey from the flowers as he flies."

"Yes," said the sweet-pea, "we have often seen him hovering over the flower-beds on a summer morning, but as you are one of the flowers from whom he takes the honey you must start the conversation with him, then we will join in after and——"

"Hush, hush!" said the other flowers; "we hear him!"

They all listened breathlessly for a few moments.

Then Miss Mignonette whispered regretfully:

"I think I saw him fly over the other side."

"Well, you had better try and get him to talk to you before it is quite dark."

The flowers all looked round in surprise and found it was the ivy-bloom who had spoken.

"But," said the heartsease timidly, "can he not talk when it gets darker?"

"Oh, yes," was the reply, "but he will be coming later on, with the others, to my feast."

"Your feast!" rejoined the flowers in surprise.

"Yes, for this is a warm, still night, and if you look my way presently you will see my blossoms covered with the visitors who have come to my feast."

"And may I ask what you give them, Madam?" asked the geranium politely.

"The honey from my blossoms," replied the ivy-bloom. "They call it 'Nectar,' sir, and I am sorry to say that sometimes my visitors drink too deeply of the nectar, and then a dreadful thing happens."

"What is it?" asked the flowers in awed voices.

"They fall down on the ground, where Mr. Toad and his family are sitting waiting for—for—I really hardly like to tell you," said the ivy-bloom, "for their supper!"



"Mr. Toad and his family are sitting waiting for—for—"

The flowers trembled.

"What a pity," murmured the daisy shyly, "that they are not content with dew as we are."

"Or better still, Miss Daisy, if you will excuse my saying so," put in Mr. Blade-o'-Grass, "that they do not know when they have had enough nectar."

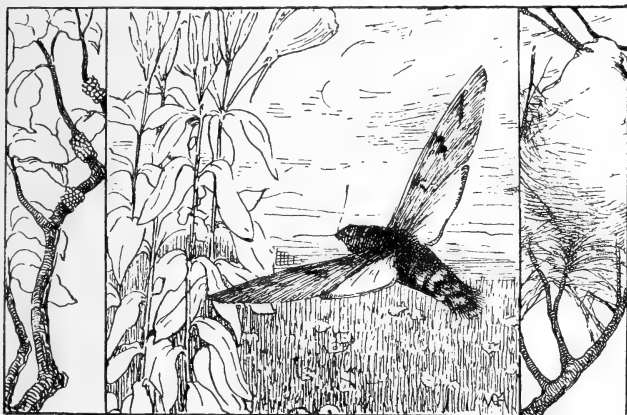
Miss Daisy blushed, and whilst Mr. Blade-o'-Grass was assuring her that he did not mean to make her do so, the geranium asked:

"And pray, Madam, who else comes to your feast?"

"Oh, the Hawk-Moths and the Tiger-Moths and the Clearwings and the Burnets—in fact, all of them, and they do enjoy

themselves, I can assure you." Then she added :
"And their eyes shine so, like—well, like glow-
worms—some of them red, others purple, blue, and
orange; but Humming-bird Moth will tell you about
this."

"Oh, if only he would make haste and come!"
cried the flowers.



Nearer came the sound.

"Listen!" said the ivy-bloom. "I believe I hear
him!"

The flowers bent their heads and listened. Then
the heartsease said softly :

"I hear his hum!" and Miss Sweet-pea whispered :

"And *I* can see him coming this way."

Nearer came the sound, and a moment later Hum-
ming-bird Moth was sucking honey from the heart

of the evening primrose. When he had taken his fill and was just about to dart off again she said timidly:

"Can I speak to you, please?"

"Of course you can, Miss Prim," he replied. "But I cannot stay *very* long as I am going to a banquet presently when it is quite dark."

Maybe it was only the wind shaking the leaves and blossoms of the ivy, but the flowers could not help thinking that they heard a quiet laugh, and they thought they guessed the reason why.

"But it is not dark yet," replied Miss Prim.

"Oh, no," said Humming-bird Moth, "I am in no hurry for a little while; it is only that I must not be late for the banquet or I might not get a place."

Was it the wind again or a little laugh? The flowers could not tell. Whatever it was, the brown moth did not seem to notice, but continued:

"Now what shall we talk about?"

"About yourself," said Miss Prim.

"Dear, dear!" he answered, "that makes me feel quite shy." Then he added: "What can you want to know about me, though?"

"We——" began the primrose.

"We!" exclaimed the moth; "but I thought it was you who wanted to speak with me."

Miss Prim looked quite pale in the dusk, as she answered:

"Please, please do not mind, but the—the other flowers want to talk to you too."

Humming-bird Moth looked round pleasantly and said :

"Oh, is that it? Well, the more the merrier."

At this the flowers rustled with pleasure and the geranium said politely :

"Thank you, sir. You see we have been very anxious to talk with you, as we always thought you were a butterfly until Orange-tip told us that you were a moth."

"No, no," replied their visitor; "I am not a butterfly. Orange-tip and her companions are Sun children, but we of Moth Land dance chiefly in the moonlight, although some—like myself—fly by day as well. Then, too, we fold our wings differently."

"Yes, yes," cried the heartsease; "Orange-tip told us about that, and also that your feelers were different from theirs, but she did not know any more."

"Except," chimed in the mignonette, "that you were caterpillars and chrysalises too before you were moths."

"Now I wonder," said the moth, "if she told you that the caterpillars of some members of our family do a great deal of mischief?"

There was silence for a moment, then the sweet-pea said timidly :

"She did say something about it, Mr.——"

"Oh, call me 'Hummy,'" he said, "for I have too long a name for everyday use."

"Yes, we know!" cried the flowers; "it is 'Lepidoptera.'"

"Ah! that is the name of our *Order*; but as well as that I have a long name to show to which branch of the family I belong. I am called 'Humming-bird Moth.' Now, shall I tell you what it all means?" he asked.

"Yes, please tell us!" exclaimed the flowers excitedly.

"Well, I am called 'Humming-bird' because when I fly fast my wings make the same sound as the little bird with that name."

"When we heard your sweet humming,
We knew you were coming!"

said the heartsease softly to herself.

Well done, Miss Pansy. I like that—and shall be more glad than ever that I can hum. But that is not all my name. I am called 'Hawk-Moth.' The members of our branch of the family have pointed front wings and short back ones; big furry bodies and fur even on their wings and legs. They can fly very fast, and some of them are most beautiful."

"And are they all as big as you, Hummy?" enquired Miss Prim.

"Oh, I am the smallest of the 'Hawk' branch," he replied, "although I am noticed more often than the others, as I fly by day as well as by night. The largest of us all is my cousin Death's-head Hawk-

Moth, but he only flies at night. His front wings are brown, and his back ones yellow with black bands on them, but his drinking-tube is very short. He is not only the largest of all the moths, but one of the biggest insects which live in this country."

"And can he hum?" asked the flowers.

"No, but he can squeak," was the reply; "and if his feet are touched it makes him very angry, and then he squeaks."

"How does he do it?" asked the geranium.

"Ah! that is *his* secret," laughed Hummy; "and he never tells, so no one knows."

"And was he ever a caterpillar?" enquired the sweet-pea.

"Yes," was the answer, "such a great big one who lived in the potato field and fed on the leaves. He has big eyes too—that cousin; they shine like red lamps when it is dark. I expect I shall meet him at the banquet to-night."

The ivy-bloom leant down and whispered to Miss Sweet-pea:

"I told you so!"

The other flowers heard too and laughed softly to themselves; but fearing that Hummy might hear and think that they were laughing at him—which would certainly have been rude and hurt his feelings—the evening primrose said softly:

"Tell us about all your other relations."

"My dear Miss Prim, I have so many that I could never, never tell you about them all."

"Have you more than Orange-tip and her play-mates, then?" enquired the heartsease in surprise.

"Why, yes; we have hundreds and hundreds and *hundreds* of different relations in this country alone." Then he added a little scornfully: "I do not believe they have even *one* hundred!"

"Well, tell us about as many as you can," urged the sweet-pea, "for we are enjoying ourselves, and it is not quite dark yet."

"No, it is not dark, but I am rather thirsty," said Hummy.

"Take another sip of honey, then—Prim will not mind!" cried all the flowers together, for they feared if once their visitor went off to the ivy-bloom they would never get him back again.

"Pray do," said Miss Prim.

So he took a long draught, giving a little hum of pleasure as he rolled up his trunk which a moment before had been thrust deep down into Miss Prim's honey-cup.

"Is it not rather a trouble to fold up your trunk every time?" asked the geranium.

"None," replied Hummy; "it just rolls up under my lip quite easily."

"Do you have your trunks when you are caterpillars?" asked the geranium.

"No," he replied; "then we have strong jaws that

we can gnaw off leaves with ; we tuck the leaf into our inner jaws, where we chew it up and swallow it ; but when we grow into moths, our strong jaws almost disappear, and we have feathery lips instead, whilst our inner jaws grow very long and roll together like a trunk."

"Why do you need such strong jaws when you are caterpillars?" suddenly asked Mr. Blade-o'-Grass.

"Because we are so hungry," laughed Hummy. "It is on account of our big appetites that we do the mischief Orange-tip told you about. There is, for instance, a relative of mine who puts her eggs on the top leaves of the green spurge in the hedges. When the caterpillars come out they eat until they strip all the leaves off. Privet Hawk-Moth is another whose caterpillars do a lot of mischief to the hedges and the lilac-bushes ; but she wears a beautiful dress. Do you know her?"

"Does she wear pale pink and black?" asked the sweet-pea.

"Yes," said Hummy ; "at least her body is pale pink and black, but her wings are pink and brown."

"And when she was a caterpillar and had grown big enough, did she stop eating like Orange-tip and Red Admiral and the other butterflies, and wriggle out of her skin?" enquired the heartsease breathlessly.

"Yes, Miss Pansy ; I see you know all about it," replied Hummy.



"He was always a fine fellow even when a caterpillar, for then he wore a nice fur coat."

"Red Admiral told us too," continued the heartsease, "about the chrysalises being fastened by a silk thread underneath the leaves of stinging nettles or of a stem, and——"

"Ah! but that is the difference," interrupted Hummy; "*our* chrysalises are either wrapped in a little silk bag or—as we Hawk-Moths do—the caterpillar creeps into the ground and lies shut up in a hole lined with silk."

"But how do you get out?" cried the flowers.

"When we are ready we wriggle up to the top, break through our case, and come out in our moth dresses. We do not gleam as much as

Orange-tip and her playmates, but some of us wear very fine suits. There is my cousin Tiger—he is very handsome. His front wings are brown with cream-coloured stripes, and the back ones are pinkish with dark blue spots. We are very proud of him. He was always a fine fellow even when a caterpillar, for then he wore a nice fur coat.”

“A fur coat!” they all exclaimed.

“But what did he do with it when he changed?” asked Miss Prim.

“Perhaps you think he threw it away. Nothing of the sort. When he was ready to change he bit off the long brown hairs and wove them into the little case in which he was going to sleep whilst growing into a moth.”

“Used his fur coat—well, that is wonderful!” agreed the flowers.

“I think I know Mr. Tiger-Moth,” said the heartsease. “Does he run about among the flower-beds in the evening?”

“Yes, Miss Pansy,” replied Hummy. “He runs about the beds because he does not fly very high for one thing, and as well as that he feeds on the lower plants.”

“I suppose you know a good many of your relations, although you are such a large family,” said the geranium thoughtfully, for he had been thinking of what Hummy had told them.

“Yes,” was the reply; “I know numbers of them

—the Bee-Hawks, the Burnets, the Emperors, the Lackeys, the Clear-wings, the Magpies, the Swallow-tails, the Vapourers—oh dear! it makes me quite out of breath!” he cried. “Miss Prim, dear, another sip, please.”

Before, however, the evening primrose had time to give permission he had unrolled his trunk and thrust it deep down into her heart, the flowers meanwhile whispering together in excitement. When he was sufficiently refreshed, he said :

“Time is getting on and I shall soon have to be going ; but I might tell you about one more of our family. Now which shall it be ?”

Then a great discussion arose amongst the flowers, but they could not agree which to choose. At length Mr. Geranium said :

“I propose that Miss Prim be asked to decide ; for, friends,” he said, turning his cheerful face to the other flowers, “we must not forget it is only because she supplies such beautiful honey that we have been able to induce our charming visitor to stay and talk so long with us to-night.”

“Yes, yes!” cried the flowers, “we agree! we agree! Let Miss Prim choose!” and they waved and fluttered in excitement.

The moth rose for a moment into the air with a soft hum, and as he did so the evening primrose bowed her stately head and said :

“Thank you, dear companions, for wishing me to

choose. I think it would be nice to hear about the 'Lackeys.'"

"Well done, Miss Prim!" cried Hummy, as he alighted gently back again on to the edge of the cup. "The Lackeys are near neighbours, for some of them live just across the garden in the orchard. In the autumn, when most of you have gone out of this garden, they put their eggs in rings around the branch of the old apple-tree yonder."

"And when do their caterpillars come out?" asked the flowers eagerly.

"In the summer," replied Hummy; "and directly they come out they spin themselves a great silk web, hanging it from one of the fruit-trees, in which they all live together until they grow up."

"What do they do then?" enquired the geranium.

"They bite holes in the web and each one starts off by himself. Then they spin a nice little case in which they sleep until it is time for them to come out in their moth dress of yellow and brown."

"Please, where do they keep their silk?" suddenly asked Mr. Blade-o'-Grass.

"In their heads," was the reply.

"In their heads!" repeated Mr. Blade-o'-Grass in astonishment.

"Well, under their jaws is a little tube," explained Hummy, "and through this little tube comes the silk. By the by," he added, "talking of silk reminds me of something."

"What is that?" asked the flowers.

"About a very useful moth—a much better silk-spinner than any of us—but she does not live in this country, so I cannot tell you much about her."

"Is she a caterpillar too?" asked the heartsease.

"Yes, but she is called a 'silkworm,' for she makes most beautiful yellow silk—lots and lots of it."

"But what does she use so much for?" enquired the sweet-pea in a puzzled voice.

"She makes her own little case," replied Hummy, "spinning hundreds and hundreds of yards to wrap herself round in, and then this ball of silk is woven into beautiful things to wear, although I cannot tell you *how* this is done. For you know," he continued, "there are those who do not grow their suits as we all do."

"And what is the moth like?" asked the geranium.

"Plain, very plain," replied Hummy, "with a short trunk, for Mrs. Bombyx—that is her name—never eats, she only wants to lay a great many eggs and——"

"Where does she put them?" interrupted the sweet-pea.

"On mulberry-trees," said Hummy, "and the caterpillar——"

"'Silkworm,' I thought it was called," put in the geranium.

"Yes, 'silkworm' if you like—but it *is* a cater-

pillar," replied Hummy. "Well, I was going to say the silkworm is a very plain little insect too, and eats a great deal."

"And is Bombyx the only one who makes this beautiful yellow silk?" asked Miss Prim.

"Oh, no, there are some great big fellows who live in a country over the sea—they are called Atlas-Moths—I know their caterpillars spin the most beautiful silk. I believe there are others too, but I cannot stay to tell you any more; I really *must* go, for I see the places are filling up."

"How can you see behind when you are looking at us?" asked the geranium in surprise.

Hummy thought a moment, then he said:

"I will ask you a riddle—listen carefully: 'Why are my eyes like my family?'"

The flowers made all kinds of guesses, but none of them were right.

"Give it up?" asked Hummy.

"Yes," cried the flowers. "Please tell us."

"Because there are hundreds and *hundreds* of them! What do you think of that?"

The flowers rustled with laughter.

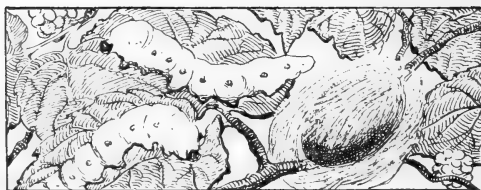
"And what is more," continued Hummy, "we can see all ways at the same time—that is how I know the places are getting filled up for the banquet."

"We must not keep you, then," said Miss Prim gently.

Then Hummy rose just above her head, bowing to

her as he did so, and with a good-night hum to the other flowers he prepared to flit away.

“Good-night!” cried they all. “We hope you will enjoy your feast!” And as the moth rose higher in the air, they added: “But do not forget, dear Hummy, when you sip the nectar, that—even in Moth Land—*‘Enough is as good as a feast!’*”



Mulberry Silkworms and Cocoon.



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